

HP Compaq 6530s Notebook PC  
HP Compaq 6531s Notebook PC  
HP Compaq 6535s Notebook PC  
Maintenance and Service Guide

© Copyright 2008 Hewlett-Packard  
Development Company, L.P.

AMD Athlon, AMD Sempron, and AMD Turion are trademarks of Advanced Micro Devices, Inc. Bluetooth is a trademark owned by its proprietor and used by Hewlett-Packard Company under license. Intel, Core, Celeron are trademarks of Intel Corporation in the United States and other countries. Microsoft, Windows, and Windows Vista are U.S. registered trademarks of Microsoft Corporation. SD Logo is a trademark of its proprietor.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

First Edition: August 2008

Document Part Number: 490127-001

## Safety warning notice

- 
- ⚠ **WARNING!** To reduce the possibility of heat-related injuries or of overheating the computer, do not place the computer directly on your lap or obstruct the computer air vents. Use the computer only on a hard, flat surface. Do not allow another hard surface, such as an adjoining optional printer, or a soft surface, such as pillows or rugs or clothing, to block airflow. Also, do not allow the AC adapter to contact the skin or a soft surface, such as pillows or rugs or clothing, during operation. The computer and the AC adapter comply with the user-accessible surface temperature limits defined by the International Standard for Safety of Information Technology Equipment (IEC 60950).
-



---

# Table of contents

## 1 Product description

## 2 External component identification

Top components .....	8
Display components .....	8
TouchPad .....	9
Buttons, switch, lights, and speakers .....	10
Keys .....	11
Front components .....	12
Right-side components .....	12
Left-side components .....	14
Bottom components .....	15

## 3 Illustrated parts catalog

Service tag .....	16
Computer major components .....	17
Plastics Kit .....	25
Cable Kit .....	26
Mass storage devices .....	27
Miscellaneous parts .....	29
Sequential part number listing .....	31

## 4 Removal and replacement procedures

Preliminary replacement requirements .....	38
Tools required .....	38
Service considerations .....	38
Plastic parts .....	38
Cables and connectors .....	39
Drive handling .....	39
Grounding guidelines .....	40
Electrostatic discharge damage .....	40
Packaging and transporting guidelines .....	41
Workstation guidelines .....	41

Equipment guidelines .....	42
Unknown user password .....	43
Component replacement procedures .....	44
Service tag .....	44
Computer feet .....	45
Battery .....	46
Hard drive .....	47
WLAN module .....	50
Memory module .....	53
Optical drive .....	55
Switch cover and keyboard .....	57
Speakers .....	61
Display assembly .....	62
Top cover .....	68
USB connector module .....	72
Bluetooth module .....	73
RTC battery .....	75
Fan .....	77
System board .....	79
Modem module .....	82
Heat sink .....	84
Processor .....	88

## 5 Computer Setup

Starting Computer Setup .....	91
Using Computer Setup .....	92
Navigating and selecting in Computer Setup .....	92
Restoring factory settings in Computer Setup .....	92
Computer Setup menus .....	94
File menu .....	94
Security menu .....	95
Diagnostics menu .....	96
System Configuration menu .....	97

## 6 Specifications

Computer specifications .....	100
14.1-inch, WXGA display specifications .....	101
Hard drive specifications .....	102
DVD±RW and CD-RW Combo Drive, Double-Layer specifications .....	103
DVD/CD-RW Combo Drive specifications .....	104
DVD-ROM Drive .....	105
System DMA specifications .....	106
System interrupt specifications .....	107

System I/O address specifications .....	108
System memory map specifications .....	110

## 7 Screw listing

Slotted Torx ST8M2.5×7.0 screw .....	111
Phillips PM2.0×3.0 screw .....	114
Phillips PM2.5×6.0 captive screw .....	115
Phillips PM2.5×10.0 captive screw .....	116
Phillips PM3.0×4.0 screw .....	117
Phillips PM2.5×4.0 screw .....	118
Torx T8M2.0×2.0 broadhead screw (9-mm) .....	119
Phillips PM2.0×2.0 broadhead screw (6-mm) .....	120
Torx T8M2.5×4.0 screw .....	121
Torx T8M2.5×6.0 screw .....	122
Phillips PM2.5×5.0 screw .....	124
Phillips PM2.0×2.0 broadhead screw (5-mm) .....	124
Phillips PM2.0×4.0 screw .....	125
Phillips PM2.5×9.0 screw .....	127
Phillips PM2.5×10.0 captive screw .....	128

## 8 Backup and recovery

Backup and recovery in Windows Vista .....	130
Overview .....	130
Backing up your information .....	130
Performing a recovery .....	131
Using the Windows recovery tools .....	132
Using f11 .....	132
Using a Windows Vista operating system DVD (purchased separately) .....	133
Backup and recovery in Windows XP .....	134
Overview .....	134
Backing up your information .....	134
Performing a recovery .....	135
Recovering your information .....	135
Recovering the operating system and programs .....	135

## 9 Connector pin assignments

Audio-in (microphone) .....	136
Audio-out (headphone) .....	136
External monitor .....	137
RJ-11 (modem) .....	138
RJ-45 (network) .....	139
Universal Serial Bus .....	139

**10 Power cord set requirements**

    Requirements for all countries and regions ..... 140

    Requirements for specific countries and regions ..... 141

**11 Recycling**

    Battery ..... 142

    Display ..... 142

**Index ..... 148**



# 1 Product description

Category	Description	Computer models equipped with GL40 system board	Computer models equipped with GM45 system board	Computer models equipped with PM45 system board	Computer models equipped with RS780 system board
<b>Product Name</b>	HP Compaq 6535s Notebook PC				√
	HP Compaq 6531s Notebook PC			√	
	HP Compaq 6530s Notebook PC	√	√		
<b>Processors</b>	<ul style="list-style-type: none"> <li>Intel® Core™2 Duo P7370 2.0 GHz processor, 3-MB L2 cache, 1066-MHz front side bus (FSB)</li> </ul>		√	√	
	<ul style="list-style-type: none"> <li>Intel Core2 Duo P8400 2.26 GHz processor, 3-MB L2 cache, 1066-MHz front side bus (FSB)</li> </ul>		√	√	
	<ul style="list-style-type: none"> <li>Intel Core2 Duo P8600 2.4 GHz processor, 3-MB L2 cache, 1066-MHz front side bus (FSB)</li> </ul>		√	√	
	<ul style="list-style-type: none"> <li>Intel Core2 Duo T9400 2.53-GHz processor, 6-MB L2 cache, 1066-MHz FSB</li> </ul>		√	√	
	<ul style="list-style-type: none"> <li>Intel Core2 Duo T5670 1.80-GHz processor, 2-MB L2 cache, 800-MHz FSB</li> </ul>		√	√	
	<ul style="list-style-type: none"> <li>Intel Core2 Duo T5870 2.00-GHz processor, 2-MB L2 cache, 800-MHz FSB</li> </ul>		√	√	
	<ul style="list-style-type: none"> <li>Intel Celeron® M 575 2.00-GHz processor, 1-MB L2 cache, 667-MHz FSB</li> </ul>	√			
	<ul style="list-style-type: none"> <li>Intel Celeron M 585 2.16-GHz processor, 1-MB L2 cache, 667-MHz FSB</li> </ul>	√			
	<ul style="list-style-type: none"> <li>Intel Celeron, Dual-Core T1600 1.66-GHz processor, 1-MB L2 cache, 667-MHz front side bus (FSB)</li> </ul>	√			

Category	Description	Computer models equipped with GL40 system board	Computer models equipped with GM45 system board	Computer models equipped with PM45 system board	Computer models equipped with RS780 system board
	<ul style="list-style-type: none"> <li>Intel Celeron, Dual-Core T1700 1.83-GHz processor, 1-MB L2 cache, 667-MHz front side bus (FSB)</li> </ul>	√			
	<ul style="list-style-type: none"> <li>AMD Turion™ X2 Ultra Dual-Core ZM-86 2.4-GHz processor, 35W, 2-MB L2 cache</li> </ul>				√
	<ul style="list-style-type: none"> <li>AMD Turion X2 Ultra Dual-Core ZM-84 2.3-GHz processor, 35W, 2-MB L2 cache</li> </ul>				√
	<ul style="list-style-type: none"> <li>AMD Turion X2 Ultra Dual-Core ZM-82 2.2-GHz processor, 35W, 2-MB L2 cache</li> </ul>				√
	<ul style="list-style-type: none"> <li>AMD Turion X2 Ultra Dual-Core ZM-80 2.1-GHz processor, 35W, 2-MB L2 cache</li> </ul>				√
	<ul style="list-style-type: none"> <li>AMD Turion X2 Dual-Core RM-70 2.0-GHz processor, 35W, 1-MB L2 cache</li> </ul>				√
	<ul style="list-style-type: none"> <li>AMD Turion X2 Dual-Core RM-72 2.1-GHz processor, 35W, 1-MB L2 cache</li> </ul>				√
	<ul style="list-style-type: none"> <li>AMD Athlon™ X2 QL-60 1.90-GHz processor, 35W, 1- MB L2 cache</li> </ul>				√
	<ul style="list-style-type: none"> <li>AMD Athlon X2 QL-62 2.0-GHz processor, 35W, 1- MB L2 cache</li> </ul>				√
	<ul style="list-style-type: none"> <li>AMD Sempron™ SI-40 2.00-GHz processor, 25W, 512-KB L2 cache</li> </ul>				√
<b>Chipset</b>	Southbridge: Intel ICH9M	√	√	√	
	Southbridge: AMD SB700				√
<b>Graphics</b>	Mobile Intel Graphics Media Accelerator 4500MHD	√	√		
	Intel Universal Memory Architecture (UMA) graphics subsystem integrated with shared video memory (dynamically allocated)	√	√		
	ATI Radeon HD 3430			√	

Category	Description	Computer models equipped with GL40 system board	Computer models equipped with GM45 system board	Computer models equipped with PM45 system board	Computer models equipped with RS780 system board
	ATI-M82se discrete graphics subsystem memory with hypermemory support <ul style="list-style-type: none"> <li>128MB GDDR2 - 500 MHz (16Mx16, Qty 4)</li> <li>256MB GDDR2 - 500 MHz (32Mx16, Qty 4)</li> </ul>			√	
	AMD RS780MN				√
	AMD UMA graphics subsystem integrated with shared video memory (dynamically allocated)				√
<b>Panels</b>	All display assemblies include 2 wireless local area network (WLAN) antennae	√	√	√	√
	<ul style="list-style-type: none"> <li>14.1-inch WXGA BrightView</li> </ul>	√	√	√	√
	<ul style="list-style-type: none"> <li>14.1-inch WXGA</li> </ul>	√	√	√	√
	<ul style="list-style-type: none"> <li>14.1-inch WXGA BrightView with camera</li> </ul>	√	√	√	√
	<ul style="list-style-type: none"> <li>14.1-inch WXGA with camera</li> </ul>	√	√	√	√
<b>Memory</b>	2 customer-accessible/upgradable memory module slots	√	√	√	√
	Supports dual-channel memory	√	√	√	√
	Supports up to 4 GB of system RAM	√	√	√	√
	PC2-5300, 2048MB and 1024MB, DDR	√	√	√	√
	PC2-6400, 2048MB and 1024MB, DDR				
	PC2-5300 and PC2-6400, 512MB, DDR	√	√	√	
	Supports the following configurations: <ul style="list-style-type: none"> <li>8192-MB total system memory (4096 × 2, dual-channel)</li> <li>4096-MB total system memory (4096 × 1, dual-channel)</li> </ul>		√	√	√
	<ul style="list-style-type: none"> <li>4096-MB total system memory (2048 × 2, dual-channel)</li> <li>3072-MB total system memory (2048 + 1024, dual-channel)</li> </ul>	√	√	√	√

Category	Description	Computer models equipped with GL40 system board	Computer models equipped with GM45 system board	Computer models equipped with PM45 system board	Computer models equipped with RS780 system board
	<ul style="list-style-type: none"> <li>2048-MB total system memory (2048 x 1, dual-channel)</li> <li>2048-MB total system memory (1024 x 2, dual-channel)</li> <li>1024-MB total system memory (1024 x 1, dual-channel)</li> </ul>				
	PC2-5300, 667-MHz and PC2-6400, 800-MHz, DDR2	√	√	√	√
	Supports the following configurations only in Brazil:	√	√	√	√
	<ul style="list-style-type: none"> <li>3072-MB total system memory (2048 + 1024, dual-channel)</li> <li>2048-MB total system memory (2048 x 1)</li> <li>2048-MB total system memory (1024 x 2, dual-channel)</li> <li>1024-MB total system memory (1024 x 1)</li> </ul>				
<b>Hard drives</b>	Supports 9.5-mm (2.5-inch) hard drives	√	√	√	√
	Customer-accessible	√	√	√	√
	Serial ATA	√	√	√	√
	Supports the following drives:	√	√	√	√
	<ul style="list-style-type: none"> <li>320-GB, 5400-rpm</li> <li>250-GB, 5400-rpm</li> <li>160-GB, 7200-rpm</li> <li>160-GB, 5400-rpm</li> <li>120-GB, 5400-rpm</li> </ul>				
	<ul style="list-style-type: none"> <li>120-GB, 7200-rpm</li> </ul>			√	
	HP 3D DriveGuard	√	√	√	√
<b>Optical drives</b>	Fixed (removal of 1 screw required)	√	√	√	√
	Customer-accessible	√	√	√	√
	Serial ATA	√	√	√	√
	12.7-mm tray load	√	√	√	√

Category	Description	Computer models equipped with GL40 system board	Computer models equipped with GM45 system board	Computer models equipped with PM45 system board	Computer models equipped with RS780 system board
	Supports the following drives:	√	√	√	√
	<ul style="list-style-type: none"> <li>DVD±RW and CD-RW Super Multi Double-Layer Combo Drive with LightScribe</li> <li>DVD/CD-RW Combo Drive</li> <li>DVD-ROM Drive</li> </ul>				
	<ul style="list-style-type: none"> <li>Blu-ray Disc ROM with SuperMulti DVD±R/RW Double-Layer Combo Drive</li> </ul>			√	
<b>Diskette drive</b>	Supports external USB diskette drive only	√	√	√	√
	Supports boot from external USB diskette drive	√	√	√	√
<b>Audio</b>	HD audio - ADI1984	√	√	√	√
<b>Modem</b>	56K 1.5-inch data/fax modem with digital line guard	√	√	√	√
<b>Ethernet</b>	10/100 Ethernet network interface card (NIC)	√	√		√
	Low-cost 10/100/1000 Ethernet network interface card (NIC)			√	
	S3/S4/S5 wake on LAN: DC - no	√	√	√	√
	S3/S4/S5 wake on LAN: AC - yes	√	√	√	√
<b>Wireless</b>	<b>Integrated WLAN options by way of wireless module:</b>				
	2 WLAN antennae built into display assembly	√	√	√	√
	Support for no-WLAN option	√	√	√	√
	Support for the following WLAN formats:	√	√	√	√
	<ul style="list-style-type: none"> <li>Broadcom 802.11a/b/g/n</li> <li>Broadcom 802.11a/b/g</li> <li>Broadcom 802.11b/g</li> </ul>				
	<ul style="list-style-type: none"> <li>Intel 802.11a/b/g</li> <li>Intel 802.11a/b/g/n</li> </ul>	√	√	√	
	<b>Integrated personal area network (PAN) options by way of Bluetooth® module:</b>				
	Support for no-WPAN option	√	√	√	√
	Broadcom Bluetooth 2.0+EDR	√	√	√	√

Category	Description	Computer models equipped with GL40 system board	Computer models equipped with GM45 system board	Computer models equipped with PM45 system board	Computer models equipped with RS780 system board
<b>Media Card Reader</b>	One ExpressCard/54 slot	√	√	√	√
	SD/MMC Card Reader supporting Memory Stick (MS), Memory Stick Pro (MSP), MultiMedia Card (MMC), MultiMedia Card (MMC) Plus, Secure Digital (SD) Memory Card, Secure Digital High Capacity (SDHC) Memory Card, xD-Picture Card (XD), xD-Picture Card (XD) Type H, and xD-Picture Card (XD) Type M	√	√	√	√
<b>Ports</b>	Audio-in (stereo microphone)	√	√	√	√
	Audio-out (stereo headphone)	√	√	√	√
	RJ-11 (modem)	√	√	√	√
	RJ-45 (Ethernet, includes link and activity lights)	√	√	√	√
	USB (4)	√	√	√	√
	VGA (Dsub 15-pin) supporting 1600 × 1200 external resolution at 75-GHz (hot plug/unplug with auto-detect)	√	√	√	√
	3-pin AC power	√	√	√	√
<b>Keyboard/ pointing devices</b>	11.97-inch keyboard with embedded numeric keypad	√	√	√	√
	TouchPad only, with 2 TouchPad buttons and vertical scrolling (taps enabled as default)	√	√	√	√
<b>Power requirements</b>	90-W AC adapter with localized cable plug support (2-wire plug with ground pin, supports 2-pin DC connector)			√	
	65-W AC adapter with localized cable plug support (2-wire plug with ground pin, supports 2-pin DC connector)	√	√		√
	6-cell, 47-Wh Li-ion battery	√	√	√	√
<b>Security</b>	Supports Kensington security sock	√	√	√	√
<b>Operating system</b>	<b>Preinstalled:</b>	√	√	√	√
	<ul style="list-style-type: none"> <li>Windows Vista® Home Basic 32</li> </ul>				
	<ul style="list-style-type: none"> <li>Windows Vista Business 32</li> </ul>				

Category	Description	Computer models equipped with GL40 system board	Computer models equipped with GM45 system board	Computer models equipped with PM45 system board	Computer models equipped with RS780 system board
	<ul style="list-style-type: none"> <li>Windows Vista Business 32 (with Windows® XP Pro images)</li> <li>FreeDOS (limited to Taiwan for use only with HP Compaq 6531s Notebook PC models)</li> <li>Red Flag Linux (in the People's Republic of China only)</li> </ul>				
	<b>Restore media:</b>	√	√	√	√
	<ul style="list-style-type: none"> <li>Windows Vista 32 Home Basic</li> <li>Windows Vista Business 32</li> <li>Windows Vista Business 64</li> <li>Windows XP Professional</li> <li>Red Flag Linux (in the People's Republic of China only)</li> <li>Windows Vista (DRDVD)</li> <li>Windows XP Pro (DRDVD)</li> <li>Windows Vista (Office Ready - DVD)</li> </ul>				
	<b>Certified:</b> Microsoft® WHQL	√	√	√	√
	<b>Web Support:</b>	√	√	√	√
	<ul style="list-style-type: none"> <li>Windows XP Professional</li> <li>Windows Vista 32 Home Basic</li> <li>Windows Vista Business 32</li> <li>Windows Vista Business 64</li> </ul>				
<b>Serviceability</b>	<b>End-user replaceable parts:</b>				
	AC adapter	√	√	√	√
	Battery (system)	√	√	√	√
	Hard drive	√	√	√	√
	Memory module	√	√	√	√
	Optical drive	√	√	√	√
	WLAN module	√	√	√	√

## 2 External component identification

### Top components

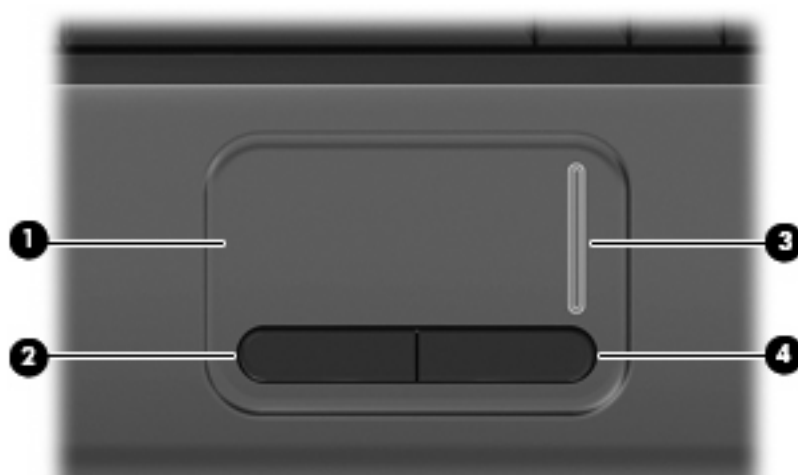
#### Display components



Item	Component	Function
(1)	WLAN antenna locations	Send and receive signals from one or more WLAN devices. These antennae are not visible from the outside of the computer.
(2)	Webcam light (select models only)	On: The integrated camera is in use.
(3)	Webcam (select models only)	Records audio and video and captures still photographs.



## TouchPad

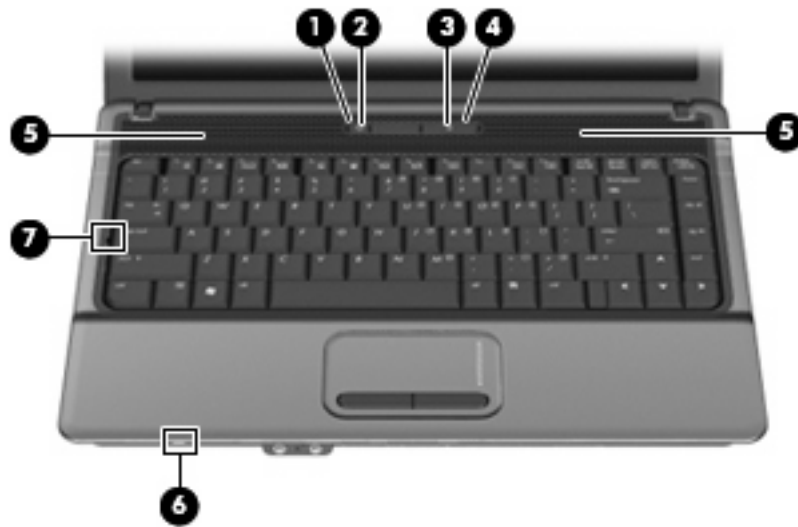


Item	Component	Function
(1)	TouchPad*	Moves the pointer and selects or activates items on the screen.
(2)	Left TouchPad button*	Functions like the left button on an external mouse.
(3)	TouchPad scroll zone	Scrolls up or down.
(4)	Right TouchPad button*	Functions like the right button on an external mouse.

\*This table describes factory settings. View or change pointing device preferences as follows:

- In Windows Vista, select **Start > Control Panel > Hardware and Sound > Mouse**.
- In Windows XP, select **Start > Control Panel > Printers and Other Hardware > Mouse**.

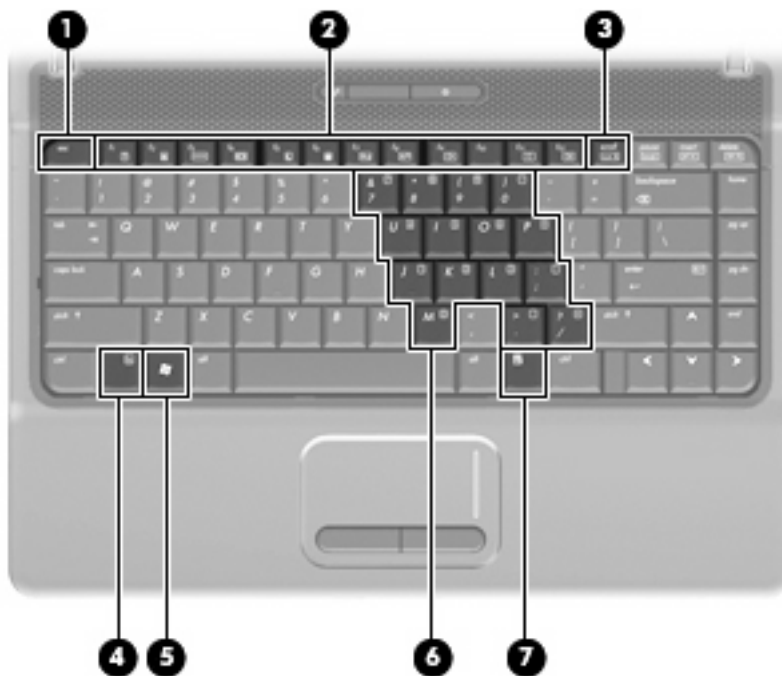
## Buttons, switch, lights, and speakers



Item	Component	Function
(1)	Wireless light	<ul style="list-style-type: none"><li>On: An integrated wireless device, such as a wireless local area network (WLAN) device, the HP Broadband Wireless Module, and/or a Bluetooth device, is on.</li><li>Off: All wireless devices are off.</li></ul>
(2)	Wireless button	<p>Turns the wireless feature on or off, but does not establish a wireless connection.</p> <p><b>NOTE:</b> A wireless network must be set up in order to establish a wireless connection.</p>
(3)	Power light	<ul style="list-style-type: none"><li>On: The computer is on.</li><li>Blinking: The computer is in the Sleep state (Windows Vista) or Standby (Windows XP).</li><li>Off: The computer is off or in Hibernation.</li></ul>
(4)	Power button	<ul style="list-style-type: none"><li>When the computer is off, press the button to turn on the computer.</li><li>When the computer is on, press the button to initiate Hibernation.</li><li>When the computer is in the Sleep state (Windows Vista) or in Standby (Windows XP), press the button briefly to exit the Sleep state or Standby.</li><li>When the computer is in Hibernation, press the button briefly to exit Hibernation.</li></ul> <p>If the computer has stopped responding and Windows shutdown procedures are ineffective, press and hold the power button for at least 5 seconds to turn off the computer.</p>

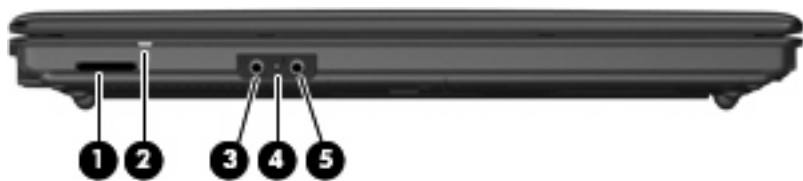
Item	Component	Function
		To learn more about power settings, follow these steps: <ul style="list-style-type: none"> <li>In Windows Vista, select <b>Start &gt; Control Panel &gt; System and Maintenance &gt; Power Options</b>.</li> <li>In Windows XP, select <b>Start &gt; Control Panel &gt; Performance and Maintenance &gt; Power Options</b>.</li> </ul>
(5)	Speakers (2)	Produce sound.
(6)	Internal display switch	Turns off the display if the display is closed while the power is on.
(7)	Caps lock light	On: Caps lock is on.

## Keys



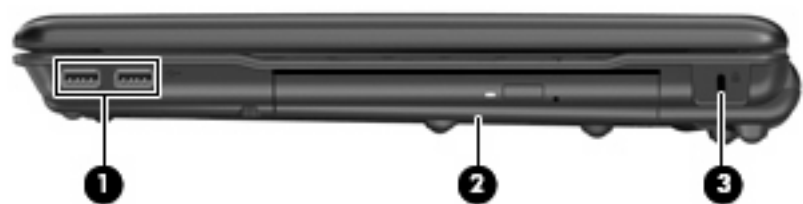
Item	Component	Function
(1)	<b>esc</b> key	Displays system information when pressed in combination with the <b>fn</b> key.
(2)	Function keys	Execute frequently used system functions when pressed in combination with the <b>fn</b> key.
(3)	num lk key	When pressed in combination with the <b>fn</b> key, the num lk key enables and disables the embedded numeric keypad.
(4)	<b>fn</b> key	Executes frequently used system functions when pressed in combination with a function key or the <b>esc</b> key.
(5)	Windows logo key	Displays the Windows Start menu.
(6)	Embedded numeric keypad keys	Can be used like the keys on an external numeric keypad.
(7)	Windows applications key	Displays a shortcut menu for items beneath the pointer.

# Front components



Item	Component	Function
(1)	Media Card Reader	Supports the following optional digital card formats: <ul style="list-style-type: none"><li>• Memory Stick (MS)</li><li>• Memory Stick Pro (MSP)</li><li>• MultiMedia Card (MMC)</li><li>• MultiMedia Card (MMC) Plus</li><li>• Secure Digital (SD) Memory Card</li><li>• Secure Digital High Capacity (SDHC) Memory Card</li><li>• xD-Picture Card (XD)</li><li>• xD-Picture Card (XD) Type H</li><li>• xD-Picture Card (XD) Type M</li></ul>
(2)	Drive light	<ul style="list-style-type: none"><li>• Blinking turquoise. The hard drive or optical drive is being accessed.</li><li>• Amber: HP 3D DriveGuard has temporarily parked the hard drive.</li></ul>
(3)	Audio-out (headphone) jack	Connects optional powered stereo speakers, headphones, ear buds, a headset, or television audio.
(4)	Internal microphone	Records sound.
(5)	Audio-in (microphone) jack	Connects an optional computer headset microphone, stereo array microphone, or monaural microphone.

# Right-side components



Item	Component	Function
(1)	USB ports (2)	Connect optional USB devices.

Item	Component	Function
(2)	Optical drive	Reads optical discs and, on select models, also writes to optical discs.
(3)	Security cable slot	Attaches an optional security cable to the computer.
		<b>NOTE:</b> The security cable is designed to act as a deterrent, but it may not prevent the computer from being mishandled or stolen.

## Left-side components



Item	Component	Function
(1)	RJ-11 (modem) jack	Connects a modem cable.
(2)	Vent	Enables airflow to cool internal components.  <b>NOTE:</b> The computer fan starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.
(3)	External monitor port	Connects an external VGA monitor or projector.
(4)	Battery light	<ul style="list-style-type: none"><li>• Amber: A battery is charging.</li><li>• Turquoise: A battery is close to full charge capacity.</li><li>• Blinking amber: A battery that is the only available power source has reached a low battery level. When the battery reaches a critical battery level, the battery light begins blinking rapidly.</li><li>• Off: If the computer is plugged into an external power source, the light turns off when all batteries in the computer are fully charged. If the computer is not plugged into an external power source, the light stays off until the battery reaches a low battery level.</li></ul>
(5)	Power connector	Connects an AC adapter.
(6)	RJ-45 (network) jack	Connects a network cable.
(7)	USB ports (2)	Connect optional USB devices.
(8)	ExpressCard slot	Supports optional ExpressCards.

## Bottom components



Item	Component	Function
(1)	Battery bay	Holds the battery.
(2)	Battery release latches (2)	Release the battery from the battery bay.
(3)	Vents (4)	Enable airflow to cool internal components.  <b>NOTE:</b> The computer fan starts up automatically to cool internal components and prevent overheating. It is normal for the internal fan to cycle on and off during routine operation.
(4)	Memory module compartment	Contains a memory module.
(5)	Hard drive bay	Holds the hard drive.
(6)	WLAN module compartment (select models only)	Contains a WLAN module slot.  <b>CAUTION:</b> To prevent an unresponsive system, use only a wireless module authorized for use in the computer by the governmental agency that regulates wireless devices in your country or region. If you install the module and then receive a warning message, remove the module to restore computer functionality, and then contact technical support through Help and Support.

## 3 Illustrated parts catalog

### Service tag

The service tag, affixed to the bottom of the computer, provides information that may be needed when troubleshooting system problems. The service tag provides the following information:

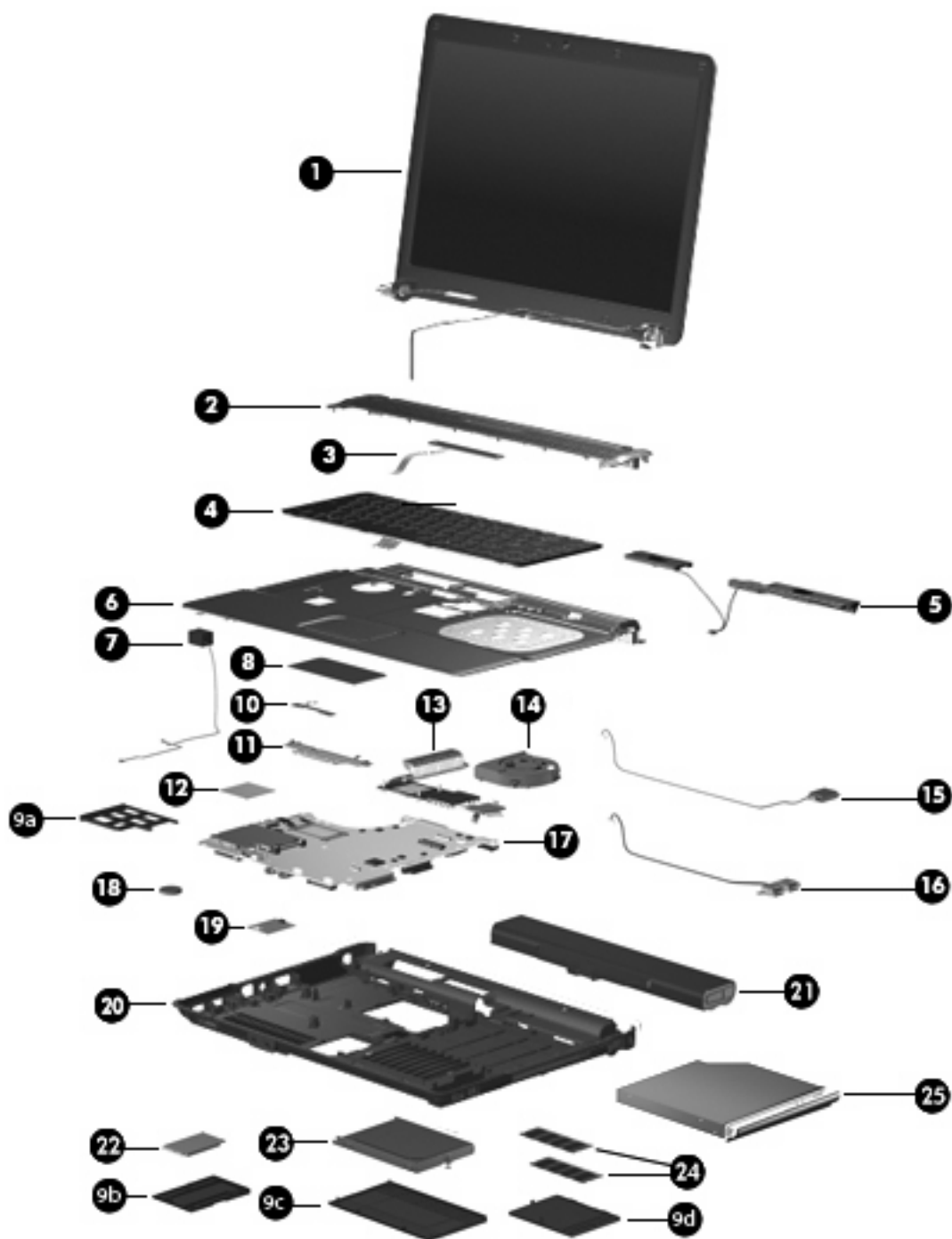
- (1) Product name: This is the product name affixed to the front of the computer.
- (2) Serial number (s/n): This is an alphanumeric identifier that is unique to each product.
- (3) Part number/Product number (p/n): This number provides specific information about the product's hardware components. The part number helps a service technician to determine what components and parts are needed.
- (4) Model description: This is the number used to locate documents, drivers, and support for the computer.
- (5) Warranty period: Describes the duration of the warranty period for this computer.

When ordering parts or requesting information, provide the computer serial number and model description provided on the service tag.





## Computer major components



Item	Description	Spare part number
(1)	<b>Display assembly</b> (include 2 WLAN antenna transceivers and cables)	
	<b>For use only with HP Compaq 6535s Notebook PC models</b>	
	14.1-inch, WXGA BrightView display assembly with camera	493155-001
	14.1-inch, WXGA BrightView display assembly	493154-001

Item	Description	Spare part number
	14.1-inch, WXGA display assembly with camera	493152-001
	14.1-inch, WXGA display assembly	493151-001
	<b>For use only with HP Compaq 6530s and 6531s Notebook PC models</b>	
	14.1-inch, WXGA BrightView display assembly with camera	491643-001
	14.1-inch, WXGA display assembly with camera	491642-001
	14.1-inch, WXGA BrightView display assembly	491641-001
	14.1-inch, WXGA display assembly	491640-001
	<b>Display internal components:</b> not illustrated	
	<b>Display bezel</b>	
	For use only with HP Compaq 6535s Notebook PC models equipped with a webcam	497617-001
	For use only with HP Compaq 6535s Notebook PC models not equipped with a webcam	497619-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models equipped with a webcam	491636-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models not equipped with a webcam	491635-001
	<b>Display Cable Kit:</b> not illustrated	
	For use only with HP Compaq 6535s Notebook PC models (includes wireless antenna and webcam cables)	497620-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models (includes wireless antenna and webcam cables)	491637-001
	<b>Display hinges</b> (left and right hinges)	
	For use only with HP Compaq 6535s Notebook PC models	493170-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models	491639-001
	<b>Display inverter</b> (includes cable)	
	For use only with HP Compaq 6535s Notebook PC models	497615-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models	491634-001
(2)	<b>Switch cover</b> (includes power button board and cable)	
	For use only with HP Compaq 6535s Notebook PC models	497614-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models	491663-001
(3)	<b>Power button board</b> (included with Switch cover)	
(4)	<b>Keyboard</b>	
	For use in Brazil	491653-201
	For use in Japan	491653-291
	For use in Latin America	491653-161
	For use in South Korea	491653-AD1
	For use in Taiwan	491653-AB1

Item	Description	Spare part number
	For use in Thailand	491653-281
	For use in the United States	491653-001
<b>(5)</b>	<b>Speakers</b>	
	For use only with HP Compaq 6535s Notebook PC models	493173-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models	491656-001
<b>(6)</b>	<b>Top cover</b> (includes TouchPad board and cable, and TouchPad button board and cable)	491632-001
<b>(7)</b>	<b>Modem module cable</b> (includes RJ-11 connector)	
<b>(8)</b>	<b>TouchPad spared with top cover</b>	
<b>(9)</b>	<b>Plastics Kit</b> (see <a href="#">Plastics Kit on page 25</a> for more Plastics Kit spare part information):	
	For use only with HP Compaq 6535s Notebook PC models	493175-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models	491253-001
<b>(9a)</b>	ExpressCard slot bezel	
<b>(9b)</b>	WLAN module compartment cover	
<b>(9c)</b>	Hard drive bay cover	
<b>(9d)</b>	Memory module compartment cover	
<b>(10)</b>	<b>TouchPad cable spared with top cover</b>	
<b>(11)</b>	<b>TouchPad bracket spared with top cover</b> (included in the Top cover kit, which also includes the TouchPad button board actuators, which are not illustrated)	
<b>(12)</b>	<b>Modem</b>	461749-001
<b>(13)</b>	<b>Heat sink</b> (includes replacement thermal material)	
	For use only with HP Compaq 6535s Notebook PC models	493174-001
	For use only with HP Compaq 6531s Notebook PC models	491980-001
	For use only with HP Compaq 6530s Notebook PC models	496679-001
<b>(14)</b>	<b>Fan</b>	
	For use only with HP Compaq 6535s Notebook PC models	493177-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models	490324-001
<b>(15)</b>	<b>Broadcom Bluetooth module</b>	
	For use in all countries and regions except Japan and Asia Pacific	398393-002
	For use only in Japan and Asia Pacific	450066-001
<b>(16)</b>	<b>USB connector and cable</b>	
	<b>Cable Kit</b> for use only with HP Compaq 6535s Notebook PC models (not illustrated; see <a href="#">Cable Kit on page 26</a> for more Cable Kit spare part number information)	497616-001
	<b>Cable Kit</b> for use only with HP Compaq 6530s and 6531s Notebook PC models (not illustrated; see <a href="#">Cable Kit on page 26</a> for more Cable Kit spare part number information)	491662-001
<b>(17)</b>	<b>System board</b> (includes replacement thermal material and the ExpressCard assembly)	

Item	Description	Spare part number
	<ul style="list-style-type: none"> <li>For use only with computer models equipped with AMD processors</li> </ul>	497613-001
	<ul style="list-style-type: none"> <li>For use only with computer models equipped with Intel processors with UMA graphics subsystem and a GM45 system board</li> </ul>	501354-001
	<ul style="list-style-type: none"> <li>For use only with computer models equipped with Intel processors with UMA graphics subsystem and a GL40 system board</li> </ul>	491250-001
	<ul style="list-style-type: none"> <li>For use only with computer models equipped with Intel processors (includes 128-MB DDR2 discrete graphics system memory)</li> </ul>	491977-001
	<ul style="list-style-type: none"> <li>For use only with computer models equipped with Intel processors (includes 256-MB DDR2 discrete graphics system memory)</li> </ul>	491976-001
<b>Processor</b> (includes replacement thermal material) (not illustrated)		
<b>Intel Core2 Duo processors:</b> (for use only with HP Compaq 6530s and 6531s Notebook PC models)		
	<ul style="list-style-type: none"> <li>T5670 1.80-GHz (2-MB L2 cache, 800-MHz FSB) (not available for Japan)</li> </ul>	507511-001
	<ul style="list-style-type: none"> <li>T5870 2.0-GHz (2-MB L2 cache, 800-MHz FSB) (not available for Japan)</li> </ul>	507512-001
	<ul style="list-style-type: none"> <li>P7370 2.0-GHz (3-MB L2 cache, 1066-MHz FSB)</li> </ul>	506455-001
	<ul style="list-style-type: none"> <li>P8400 2.26GHz (3-MB L2 cache, 1066-MHz FSB)</li> </ul>	491659-001
	<ul style="list-style-type: none"> <li>P8600 2.40-GHz (3-MB L2 cache, 1066-MHz FSB)</li> </ul>	491660-001
	<ul style="list-style-type: none"> <li>T9400 2.53-GHz (6-MB L2 cache, 1066-MHz FSB)</li> </ul>	491661-001
<b>Intel Celeron M processors:</b> (for use only with HP Compaq 6530s and 6531s Notebook PC models)		
	<ul style="list-style-type: none"> <li>575 2.0-GHz (1-MB L2 cache, 667-MHz FSB)</li> </ul>	506443-001
	<ul style="list-style-type: none"> <li>585 2.16-GHz (1-MB L2 cache, 667-MHz FSB)</li> </ul>	506444-001
<b>Intel Celeron Dual-Core processors:</b> (for use only with HP Compaq 6530s and 6531s Notebook PC models)		
	<ul style="list-style-type: none"> <li>T1600 1.66GHz (1-MB, 667-MHz FSB)</li> </ul>	506453-001
	<ul style="list-style-type: none"> <li>T1700 1.83-GHz (1-MB, 667-MHz FSB)</li> </ul>	506454-001
<b>AMD Turion X2 Ultra Dual-Core mobile processors:</b> (for use only with HP Compaq 6535s Notebook PC models)		
	<ul style="list-style-type: none"> <li>ZM-86 2.4GHz (35W 2-MB L2 cache)</li> </ul>	493150-001
	<ul style="list-style-type: none"> <li>ZM-84 2.3GHz (35W 2-MB L2 cache)</li> </ul>	506283-001
	<ul style="list-style-type: none"> <li>ZM-82 2.2GHz (35W 2-MB L2 cache)</li> </ul>	493149-001
	<ul style="list-style-type: none"> <li>ZM-80 2.1GHz (35W 2-MB L2 cache)</li> </ul>	493148-001
<b>AMD Turion X2 Dual-Core mobile processors:</b> (for use only with HP Compaq 6535s Notebook PC models)		
	<ul style="list-style-type: none"> <li>RM-72 2.1GHz (35W 1-MB L2 cache)</li> </ul>	506282-001
	<ul style="list-style-type: none"> <li>RM-70 2.0GHz (35W 1-MB L2 cache)</li> </ul>	493147-001
<b>AMD Athlon X2 Dual-Core processors:</b> (for use only with HP Compaq 6535s Notebook PC models)		
	<ul style="list-style-type: none"> <li>QL-62 2.0GHz (35W 1-MB L2 cache)</li> </ul>	506281-001
	<ul style="list-style-type: none"> <li>QL-60 1.9GHz (35W 1-MB L2 cache)</li> </ul>	493146-001
<b>AMD Sempron processor:</b> (for use only with HP Compaq 6535s Notebook PC models)		

Item	Description	Spare part number
	<ul style="list-style-type: none"> <li>SI-40 2.0GHz (25W 512-KB L2 cache)</li> </ul>	493145-001
(18)	<b>RTC battery</b>	449137-001
(19)	<b>Modem module</b> (includes a modem module cable)	
	<b>For use only with HP Compaq 6535s Notebook PC models</b>	
	For use in all countries and regions except Australia and New Zealand	491575-001
	For use only in Australia and New Zealand	491575-011
	<b>For use only with HP Compaq 6530s and 6531s Notebook PC models</b>	
	For use in all countries and regions except Australia and New Zealand	461749-001
	For use only in Australia and New Zealand	461749-011
(20)	<b>Base enclosure</b> (includes rubber feet)	
	For use only with HP Compaq 6535s Notebook PC models	493172-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models	491631-001
	<b>Rubber Kit</b> (not illustrated, contains 6 computer feet and 8 display bezel screw covers)	
	For use only with HP Compaq 6535s Notebook PC models	497622-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models	491654-001
(21)	<b>6-cell, 47-Wh Li-ion battery</b>	
	For use only with HP Compaq 6535s Notebook PC models	456864-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models	491657-001
(22)	<b>WLAN module</b>	
	<b>Broadcom 802.11a/b/g/n WLAN modules:</b>	
	<ul style="list-style-type: none"> <li>Broadcom 4321 802.11a/b/g/n WLAN module for use in Antigua and Barbuda, Barbados, Belize, Canada, the Cayman Islands, Guam, Puerto Rico, Trinidad and Tobago, the U.S. Virgin Islands, and the United States</li> </ul>	453730-001
	<ul style="list-style-type: none"> <li>Broadcom 4321 802.11a/b/g/n WLAN module for use in Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, the Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bermuda, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, the British Virgin Islands, Brunei, Bulgaria, Burkina Faso, Burundi, Cameroon, Cape Verde, the Central African Republic, Chad, Chile, the People's Republic of China, Colombia, Comoros, the Congo, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, Djibouti, Dominica, the Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, French Guiana, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece, Grenada, Guadeloupe, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Ireland, Israel, Italy, the Ivory Coast, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, the Maldives, Mali, Malta, the Marshall Islands, Martinique, Mauritania, Mauritius, Mexico, Micronesia, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nauru, Nepal, the Netherlands, the Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Poland, Portugal, the Republic of Moldova, Romania, Russia, Rwanda, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, the Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, the Solomon Islands, Somalia, South Africa, South Korea, Spain, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines,</li> </ul>	453730-002

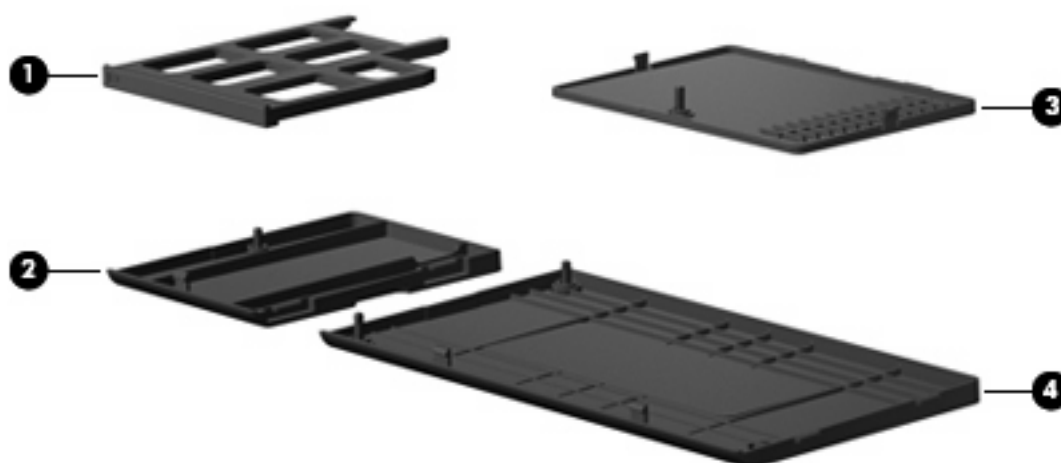
Item	Description	Spare part number
	Suriname, Swaziland, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, the United Arab Emirates, the United Kingdom, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Zaire, Zambia, and Zimbabwe	
	Broadcom 4321 802.11a/b/g/n WLAN module for use only in Japan	453730-291
•	Broadcom 4322 802.11a/b/g/n WLAN module for use in Antigua and Barbuda, Barbados, Belize, Canada, the Cayman Islands, Guam, Puerto Rico, Trinidad and Tobago, the U.S. Virgin Islands, and the United States	487330-001
•	Broadcom 4322 802.11a/b/g/n WLAN module for use in Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, the Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bermuda, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, the British Virgin Islands, Brunei, Bulgaria, Burkina Faso, Burundi, Cameroon, Cape Verde, the Central African Republic, Chad, Chile, the People's Republic of China, Colombia, Comoros, the Congo, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, Djibouti, Dominica, the Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, French Guiana, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece, Grenada, Guadeloupe, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Ireland, Israel, Italy, the Ivory Coast, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, the Maldives, Mali, Malta, the Marshall Islands, Martinique, Mauritania, Mauritius, Mexico, Micronesia, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nauru, Nepal, the Nether Antilles, the Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Poland, Portugal, the Republic of Moldova, Romania, Russia, Rwanda, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, the Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, the Solomon Islands, Somalia, South Africa, South Korea, Spain, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Swaziland, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, the United Arab Emirates, the United Kingdom, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Zaire, Zambia, and Zimbabwe	487330-002
<b>Broadcom 802.11b/g WLAN modules:</b>		
•	Broadcom BCM4312 802.11b/g WLAN module for use in Antigua and Barbuda, Barbados, Belize, Canada, the Cayman Islands, Guam, Puerto Rico, Trinidad and Tobago, the U.S. Virgin Islands, and the United States	459263-001
•	Broadcom BCM4312 802.11b/g WLAN module for use in Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, the Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bermuda, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, the British Virgin Islands, Brunei, Bulgaria, Burkina Faso, Burundi, Cameroon, Cape Verde, the Central African Republic, Chad, Chile, the People's Republic of China, Colombia, Comoros, the Congo, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, Djibouti, Dominica, the Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, French Guiana, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece, Grenada, Guadeloupe, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Ireland, Israel, Italy, the Ivory Coast, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, the Maldives, Mali, Malta, the Marshall Islands, Martinique, Mauritania, Mauritius, Mexico, Micronesia, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nauru, Nepal, the Nether Antilles, the Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Poland, Portugal, the Republic of Moldova, Romania, Russia, Rwanda, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, the Seychelles, Sierra Leone,	459263-002

Item	Description	Spare part number
	Singapore, Slovakia, Slovenia, the Solomon Islands, Somalia, South Africa, South Korea, Spain, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Swaziland, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, the United Arab Emirates, the United Kingdom, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Zaire, Zambia, and Zimbabwe	
	<b>Intel 802.11a/b/g WLAN module:</b>	
	<ul style="list-style-type: none"> <li>Intel Wi-Fi Link 5100 802.11a/b/g WLAN module for use in all countries and regions</li> </ul>	482957-001
	<b>Intel 802.11a/b/g/n WLAN module:</b>	
	<ul style="list-style-type: none"> <li>Intel Wi-Fi Link 5100 802.11a/b/g/n WLAN module for use in all countries and regions</li> </ul>	480985-001
	<b>Broadcom 802.11a/b/g WLAN modules:</b>	
	<ul style="list-style-type: none"> <li>Broadcom 4311AG 802.11a/b/g WLAN module for use in Canada, the Cayman Islands, Guam, Puerto Rico, the U.S. Virgin Islands, and the United States</li> </ul>	441075-001
	<ul style="list-style-type: none"> <li>Broadcom 4311AG 802.11a/b/g WLAN module for use in Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, the Bahamas, Bahrain, Bangladesh, Barbados, Belgium, Belize, Benin, Bermuda, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, the British Virgin Islands, Brunei, Bulgaria, Burkina Faso, Burundi, Cameroon, Cape Verde, the Cayman Islands, the Central African Republic, Chad, Chile, Colombia, Comoros, the Congo, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, Djibouti, Dominica, the Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, French Guiana, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece, Guadeloupe, Guam, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Ireland, Italy, the Ivory Coast, Jamaica, Jordan, Kenya, Kiribati, Kyrgyzstan, Laos, Latvia, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, the Maldives, Mali, Malta, the Marshall Islands, Martinique, Mauritania, Mauritius, Mexico, Micronesia, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nauru, Nepal, the Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, the People's Republic of China, Peru, the Philippines, Poland, Portugal, Puerto Rico, the Republic of Moldova, Romania, Russia, Rwanda, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, the Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, the Solomon Islands, Somalia, South Africa, Spain, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Swaziland, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, the United Arab Emirates, the United Kingdom, Uruguay, Uzbekistan, Venezuela, Vietnam, Yemen, Zaire, Zambia, and Zimbabwe</li> </ul>	441075-002
	<ul style="list-style-type: none"> <li>Broadcom 4311AG 802.11a/b/g WLAN module for use in Japan</li> </ul>	441075-291
(23)	<b>Hard drive</b> (includes hard drive bracket)	
	For use only with HP Compaq 6535s Notebook PC models	
	320-GB, 5400-rpm	500324-001
	250-GB, 5400-rpm	493165-001
	160-GB, 5400-rpm	493164-001
	120-GB, 5400-rpm	493163-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models	
	250-GB, 5400-rpm	491647-001
	160-GB, 7200-rpm	506456-001

Item	Description	Spare part number
	160-GB, 5400-rpm	491646-001
	120-GB, 7200-rpm	491645-001
	120-GB, 5400-rpm	491644-001
<b>(24)</b>	<b>Memory modules</b> (PC2-5300, 667-MHz, DDR2)	
	For use only with HP Compaq 6535s Notebook PC models	
	1-GB	493158-001
	2-GB	493159-001
	<b>Memory modules</b> (PC2-6400, 800-MHz, DDR2)	
	For use only with HP Compaq 6535s Notebook PC models	
	1-GB	493161-001
	2-GB	493162-001
	<b>Memory modules</b> (PC2-5300, 667-MHz, DDR2)	
	For use only with HP Compaq 6530s and 6531s Notebook PC models	
	1-GB	491623-001
	2-GB	491625-001
	<b>Memory modules</b> (PC2-6400, 800-MHz, DDR2)	
	For use only with HP Compaq 6530s and 6531s Notebook PC models	
	1-GB	491624-001
	2-GB	491626-001
<b>(25)</b>	<b>Optical drive</b> (includes bezel and bracket)	
	For use only with HP Compaq 6535s Notebook PC models	
	DVD±RW Double-Layer Drive with LightScribe	493168-001
	DVD/CD-RW Combo Drive	493167-001
	DVD-ROM Drive	493166-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models	
	Blu-ray Disc ROM with SuperMulti DVD±R/RW Double-Layer	491652-001
	DVD±RW Double-Layer Drive with LightScribe	491651-001
	DVD±RW and CD-RW Combo Drive, Double-Layer	491650-001
	DVD-ROM Drive	491649-001

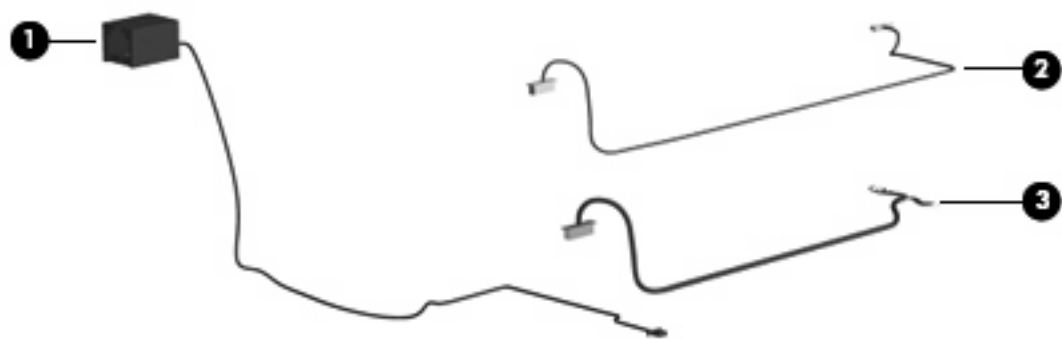


## Plastics Kit



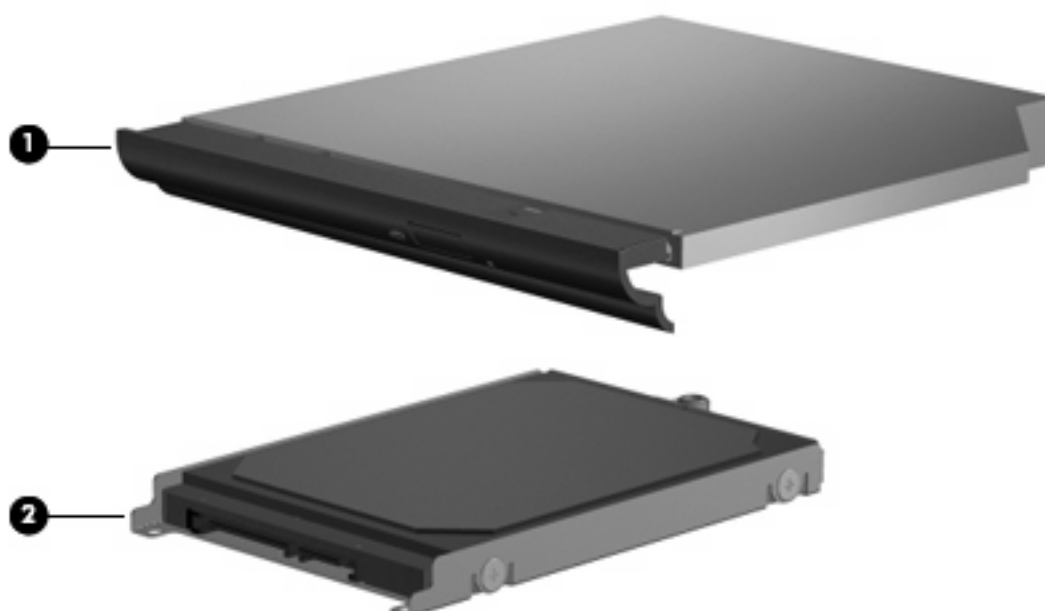
Item	Description	Spare part number
<b>Plastics Kit:</b>		
	For use only with HP Compaq 6535s Notebook PC models	493175-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models	491253-001
(1)	ExpressCard slot bezel	
(2)	WLAN module compartment cover (includes one captive screw, secured by a C-clip)	
(3)	Memory module compartment cover (includes one captive screw, secured by a C-clip)	
(4)	Hard drive bay cover (includes 2 captive screws, secured by C-clips)	

# Cable Kit



Item	Description	Spare part number
<b>Cable Kit</b>		
	For use only with HP Compaq 6535s Notebook PC models	497616-001
	For use only with HP Compaq 6530s and 6531s Notebook PC models	491662-001
(1)	RJ-11 (modem) jack cable	
(2)	USB cable	
(3)	Bluetooth cable	

# Mass storage devices



Item	Description	Spare part number
(1)	<b>Optical drives</b> (include bezel and bracket)	
	<b>For use only with HP Compaq 6535s Notebook PC models</b>	
	DVD±RW Double-Layer Drive with LightScribe	493168-001
	DVD/CD-RW Combo Drive	493167-001
	DVD-ROM Drive	493166-001
	<b>For use only with HP Compaq 6530s and 6531s Notebook PC models</b>	
	Blu-ray Disc ROM with SuperMulti DVD±R/RW Double-Layer	491652-001
	DVD±RW Double-Layer Drive with LightScribe	491651-001
	DVD±RW and CD-RW Combo Drive, Double-Layer	491650-001
	DVD-ROM Drive	491649-001
(2)	<b>Hard drives</b> (include bracket)	
	<b>For use only with HP Compaq 6535s Notebook PC models</b>	
	320-GB, 5400-rpm	500324-001
	250-GB, 5400-rpm	493165-001
	160-GB, 5400-rpm	493164-001
	120-GB, 5400-rpm	490320-001
	<b>For use only with HP Compaq 6530s and 6531s Notebook PC models</b>	
	250-GB, 5400-rpm	491647-001
	160-GB, 7200-rpm	506456-001
	160-GB, 5400-rpm	491646-001

Item	Description	Spare part number
	120-GB, 7200-rpm	491645-001
	120-GB, 5400 rpm	491644-001

## Miscellaneous parts

Description	Spare part number
<b>AC adapters</b>	
65-W AC adapter	463958-001
90-W slimline AC adapter (for use only with HP Compaq 6530s and 6531s Notebook PC models in all countries and regions except India)	463955-001
90-W slimline AC adapter (for use only with HP Compaq 6530s and 6531s Notebook PC models in India)	463956-001
<b>Logo Kits</b>	
For use only with HP Compaq 6535s Notebook PC models	493178-001
For use only with HP Compaq 6530s and 6531s Notebook PC models	491658-001
<b>Display hardware kit</b> for use only with HP Compaq 6535s Notebook PC models (includes screws, rubber bumper, display shield, and tape)	500323-001
<b>Nylon carrying case</b>	325814-001
<b>USB 1.1 diskette drive</b>	359118-001
<b>Power cords:</b>	
For use in the United States	490371-001
For use in Australia and New Zealand	490371-011
For use in Europe, the Middle East, and Africa	490371-021
For use in the United Kingdom	490371-031
For use in Italy	490371-061
For use in Denmark	490371-081
For use in Switzerland	490371-111
For use in Brazil	490371-201
For use in Japan	490371-291
For use in the People's Republic of China	490371-AA1
For use in Taiwan	490371-AB1
For use in South Korea	490371-AD1
For use in South Africa	490371-AR1
For use in Iceland	490371-BB1
For use in Argentina	490371-D01
For use in India	490371-D61
<b>Screw Kit</b>	
For use only with HP Compaq 6535s Notebook PC models	493176-001
For use only with HP Compaq 6530s and 6531s Notebook PC models	491655-001
Screw kits include:	

Description	Spare part number
• Phillips PM2.0×3.0 screw	
• Phillips PM2.0×4.0 screw	
• Phillips PM2.5×6.0 captive screw	
• Phillips PM2.5×5.0 screw	
• Phillips PM2.5×4.0 screw	
• Phillips PM2.5×9.0 screw	
• Phillips PM2.5×10.0 captive screw	
• Phillips PM3.0×4.0 screw	
• Phillips PM2.0×2.0 broadhead screw (5-mm)	
• Phillips PM2.0×2.0 broadhead screw (6-mm)	
• Torx T8M2.0×2.0 broadhead (9-mm)	
• Slotted Torx ST8M2.5×7.0 screw	
• Torx T8M2.5×6.0 screw	
• Torx T8M2.5×4.0 screw	

## Sequential part number listing

Spare part number	Description
325814-001	Nylon carrying case
359118-001	USB 1.1 diskette drive
398393-002	Broadcom Bluetooth module for use in all countries and regions except Japan and Asia Pacific
441075-001	Broadcom 4311AG 802.11a/b/g WLAN module for use in Canada, the Cayman Islands, Guam, Puerto Rico, the U.S. Virgin Islands, and the United States
441075-002	Broadcom 4311AG 802.11a/b/g WLAN module for use in Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, the Bahamas, Bahrain, Bangladesh, Barbados, Belgium, Belize, Benin, Bermuda, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, the British Virgin Islands, Brunei, Bulgaria, Burkina Faso, Burundi, Cameroon, Cape Verde, the Cayman Islands, the Central African Republic, Chad, Chile, Colombia, Comoros, the Congo, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, Djibouti, Dominica, the Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, French Guiana, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece, Guadeloupe, Guam, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Ireland, Italy, the Ivory Coast, Jamaica, Jordan, Kenya, Kiribati, Kyrgyzstan, Laos, Latvia, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, the Maldives, Mali, Malta, the Marshall Islands, Martinique, Mauritania, Mauritius, Mexico, Micronesia, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nauru, Nepal, the Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, the People's Republic of China, Peru, the Philippines, Poland, Portugal, Puerto Rico, the Republic of Moldova, Romania, Russia, Rwanda, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, the Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, the Solomon Islands, Somalia, South Africa, Spain, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Swaziland, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, the United Arab Emirates, the United Kingdom, Uruguay, Uzbekistan, Venezuela, Vietnam, Yemen, Zaire, Zambia, and Zimbabwe
441075-291	Broadcom 4311AG 802.11a/b/g WLAN module for use in Japan
449137-001	RTC battery
450066-001	Broadcom Bluetooth module for use only in Japan and Asia Pacific
453730-001	Broadcom 4321 802.11a/b/g/n WLAN module for use in Antigua and Barbuda, Barbados, Belize, Canada, the Cayman Islands, Guam, Puerto Rico, Trinidad and Tobago, the U.S. Virgin Islands, and the United States
453730-002	Broadcom 4321 802.11a/b/g/n WLAN module for use in Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, the Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bermuda, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, the British Virgin Islands, Brunei, Bulgaria, Burkina Faso, Burundi, Cameroon, Cape Verde, the Central African Republic, Chad, Chile, the People's Republic of China, Colombia, Comoros, the Congo, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, Djibouti, Dominica, the Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, French Guiana, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece, Grenada, Guadeloupe, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Ireland, Israel, Italy, the Ivory Coast, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, the Maldives, Mali, Malta, the Marshall Islands, Martinique, Mauritania, Mauritius, Mexico, Micronesia, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nauru, Nepal, the Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Poland, Portugal, the Republic of Moldova, Romania, Russia, Rwanda, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, the Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, the Solomon Islands, Somalia, South Africa, South Korea, Spain, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Swaziland, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, the United Arab Emirates, the United Kingdom, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Zaire, Zambia, and Zimbabwe

Spare part number	Description
453730-291	Broadcom 4321 802.11a/b/g/n WLAN module for use only in Japan
456864-001	6-cell, 47-Wh Li-ion battery (for use only with HP Compaq 6535s Notebook PC models)
459263-001	Broadcom BCM4312 802.11b/g WLAN module for use in Antigua and Barbuda, Barbados, Belize, Canada, the Cayman Islands, Guam, Puerto Rico, Trinidad and Tobago, the U.S. Virgin Islands, and the United States
459263-002	Broadcom BCM4312 802.11b/g WLAN module for use in Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, the Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bermuda, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, the British Virgin Islands, Brunei, Bulgaria, Burkina Faso, Burundi, Cameroon, Cape Verde, the Central African Republic, Chad, Chile, the People's Republic of China, Colombia, Comoros, the Congo, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, Djibouti, Dominica, the Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, French Guiana, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece, Grenada, Guadeloupe, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Ireland, Israel, Italy, the Ivory Coast, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, the Maldives, Mali, Malta, the Marshall Islands, Martinique, Mauritania, Mauritius, Mexico, Micronesia, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nauru, Nepal, the Nether Antilles, the Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Poland, Portugal, the Republic of Moldova, Romania, Russia, Rwanda, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, the Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, the Solomon Islands, Somalia, South Africa, South Korea, Spain, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Swaziland, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, the United Arab Emirates, the United Kingdom, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Zaire, Zambia, and Zimbabwe
461749-001	Modem module for use only with HP Compaq 6530s and 6531s Notebook PC models in all countries and regions except Australia and New Zealand
461749-011	Modem module for use only with HP Compaq 6530s and 6531s Notebook PC models in Australia and New Zealand
463955-001	90-W slimline AC adapter (for use only with HP Compaq 6530s and 6531s Notebook PC models in all countries and regions except India)
463956-001	90-W slimline AC adapter (for use only with HP Compaq 6530s and 6531s Notebook PC models in India)
463958-001	65-W AC adapter
480985-001	Intel Wi-Fi Link 5100 802.11a/b/g/n WLAN module for use in all countries and regions
482957-001	Intel Wi-Fi Link 5100 802.11a/b/g WLAN module for use in all countries and regions
487330-001	Broadcom 4322 802.11a/b/g/n WLAN module for use in Antigua and Barbuda, Barbados, Belize, Canada, the Cayman Islands, Guam, Puerto Rico, Trinidad and Tobago, the U.S. Virgin Islands, and the United States
487330-002	Broadcom 4322 802.11a/b/g/n WLAN module for use in Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, the Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bermuda, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, the British Virgin Islands, Brunei, Bulgaria, Burkina Faso, Burundi, Cameroon, Cape Verde, the Central African Republic, Chad, Chile, the People's Republic of China, Colombia, Comoros, the Congo, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, Djibouti, Dominica, the Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, French Guiana, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece, Grenada, Guadeloupe, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Ireland, Israel, Italy, the Ivory Coast, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, the Maldives, Mali, Malta, the Marshall Islands, Martinique, Mauritania, Mauritius, Mexico, Micronesia, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nauru, Nepal, the Nether Antilles, the Netherlands, New



Spare part number	Description
	Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Poland, Portugal, the Republic of Moldova, Romania, Russia, Rwanda, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, the Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, the Solomon Islands, Somalia, South Africa, South Korea, Spain, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Swaziland, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, the United Arab Emirates, the United Kingdom, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Zaire, Zambia, and Zimbabwe
490324-001	Fan for use only with HP Compaq 6530s and 6531s Notebook PC models
490371-001	Power cord for use in the United States
490371-011	Power cord for use in Australia and New Zealand
490371-021	Power cord for use in Europe, the Middle East, and Africa
490371-031	Power cord for use in the United Kingdom
490371-061	Power cord for use in Italy
490371-081	Power cord for use in Denmark
490371-111	Power cord for use in Switzerland
490371-201	Power cord for use in Brazil
490371-291	Power cord for use in Japan
490371-AA1	Power cord for use in the People's Republic of China
490371-AB1	Power cord for use in Taiwan
490371-AD1	Power cord for use in South Korea
490371-AR1	Power cord for use in South Africa
490371-BB1	Power cord for use in Iceland
490371-D01	Power cord for use in Argentina
490371-D61	Power cord for use in India
491250-001	System board (includes replacement thermal material and the ExpressCard assembly) for use only with computer models equipped with Intel processors with UMA graphics subsystem and a GL40 system board
491253-001	Plastics Kit for use only with HP Compaq 6530s and 6531s Notebook PC models (see <a href="#">Plastics Kit on page 25</a> for more Plastics Kit spare part information)
491575-001	Modem module (for use only with HP Compaq 6535s Notebook PC models in all countries and regions except Australia and New Zealand)
491575-011	Modem module (for use only with HP Compaq 6535s Notebook PC models in Australia and New Zealand)
491623-001	1-GB memory module (PC2-5300, 667-MHz, DDR2) for use only with HP Compaq 6530s and 6531s Notebook PC models
491624-001	1-GB memory module (PC2-6400, 800-MHz, DDR2) for use only with HP Compaq 6530s and 6531s Notebook PC models
491625-001	2-GB memory module (PC2-5300, 667-MHz, DDR2) for use only with HP Compaq 6530s and 6531s Notebook PC models
491626-001	2-GB memory module (PC2-6400, 800-MHz, DDR2) for use only with HP Compaq 6530s and 6531s Notebook PC models

Spare part number	Description
491630-001	Webcam module (for use only with HP Compaq 6530s and 6531s Notebook PC models)
491631-001	Base enclosure (includes rubber feet) for use only with HP Compaq 6530s and 6531s Notebook PC models
491632-001	Top cover (includes TouchPad board and cable, and TouchPad button board and cable)
491634-001	Display inverter (includes cable) for use only with HP Compaq 6530s and 6531s Notebook PC models
491635-001	Display bezel for use only with HP Compaq 6530s and 6531s Notebook PC models not equipped with a webcam
491636-001	Display bezel for use only with HP Compaq 6530s and 6531s Notebook PC models equipped with a webcam
491637-001	Display Cable Kit for use only with HP Compaq 6530s and 6531s Notebook PC models (includes wireless antenna and webcam cables)
491639-001	Display hinges (includes left and right hinges) for use only with HP Compaq 6530s and 6531s Notebook PC models
491640-001	14.1-inch, WXGA display assembly for use only with HP Compaq 6530s and 6531s Notebook PC models
491641-001	14.1-inch, WXGA BrightView display assembly for use only with HP Compaq 6530s and 6531s Notebook PC models
491642-001	14.1-inch, WXGA display assembly with camera for use only with HP Compaq 6530s and 6531s Notebook PC models
491643-001	14.1-inch, WXGA BrightView display assembly with camera for use only with HP Compaq 6530s and 6531s Notebook PC models
491644-001	120-GB, 5400-rpm hard drive for use only with HP Compaq 6530s and 6531s Notebook PC models (includes hard drive bracket)
491645-001	120-GB, 7200-rpm hard drive for use only with HP Compaq 6530s and 6531s Notebook PC models (includes hard drive bracket)
491646-001	160-GB, 5400-rpm hard drive for use only with HP Compaq 6530s and 6531s Notebook PC models (includes hard drive bracket)
491647-001	250-GB, 5400-rpm hard drive for use only with HP Compaq 6530s and 6531s Notebook PC models (includes hard drive bracket)
491649-001	DVD-ROM Drive for use only with HP Compaq 6530s and 6531s Notebook PC models (includes bezel and bracket)
491650-001	DVD±RW and CD-RW Combo Drive, Double-Layer for use only with HP Compaq 6530s and 6531s Notebook PC models (includes bezel and bracket)
491651-001	DVD±RW Double-Layer Drive with LightScribe for use only with HP Compaq 6530s and 6531s Notebook PC models (includes bezel and bracket)
491652-001	Blu-ray Disc ROM with SuperMulti DVD±R/RW Double-Layer for use only with HP Compaq 6530s and 6531s Notebook PC models (includes bezel and bracket)
491653-001	Keyboard for use in the United States
491653-161	Keyboard for use in Latin America
491653-201	Keyboard for use in Brazil
491653-281	Keyboard for use in Thailand
491653-291	Keyboard for use in Japan

Spare part number	Description
491653-AB1	Keyboard for use in Taiwan
491653-AD1	Keyboard for use in South Korea
491654-001	Rubber Kit for use only with HP Compaq 6530s and 6531s Notebook PC models (contains 6 computer feet and 8 display bezel screw covers)
491655-001	Screw Kit for use only with HP Compaq 6530s and 6531s Notebook PC models
491656-001	Speakers for use only with HP Compaq 6530s and 6531s Notebook PC models
491657-001	6-cell, 47-Wh Li-ion battery for use only with HP Compaq 6530s and 6531s Notebook PC models
491658-001	Logo Kit for use only with HP Compaq 6530s and 6531s Notebook PC models
491659-001	Intel Core2 Duo P8400 2.26-GHz processor (3-MB L2 cache, 1066-MHz FSB, includes replacement thermal material)
491660-001	Intel Core2 Duo P8600 2.4-GHz processor (3-MB L2 cache, 1066-MHz FSB, includes replacement thermal material)
491661-001	Intel Core2 Duo T9400 2.53-GHz processor (6-MB L2 cache, 1066-MHz FSB), includes replacement thermal material)
491662-001	Cable Kit for use only with HP Compaq 6530s and 6531s Notebook PC models (includes RJ-11 (modem) cable, USB cable, and Bluetooth cable)
491663-001	Switch cover (includes power button board and cable) for use only with HP Compaq 6530s and 6531s Notebook PC models
491976-001	System board (includes replacement thermal material and the ExpressCard assembly) for use only with computer models equipped with Intel processors (includes 256-MB DDR2 discrete graphics system memory)
491977-001	System board (includes replacement thermal material and the ExpressCard assembly) for use only with computer models equipped with Intel processors (includes 128-MB DDR2 discrete graphics system memory)
491980-001	Heat sink (for use only with HP Compaq 6531s Notebook PC models)
493145-001	AMD Sempron SI-40 2.0GHz processor (25W 512-KB L2 cache)
493146-001	AMD Athlon X2 QL-60 1.9GHz processor (35W 1-MB L2 cache)
493147-001	AMD Turion X2 Dual-Core RM-70 2.0GHz processor (35W 1-MB L2 cache)
493148-001	AMD Turion X2 Ultra Dual-Core ZM-80 2.1GHz processor (35W 2-MB L2 cache)
493149-001	AMD Turion X2 Ultra Dual-Core ZM-82 2.2GHz processor (35W 2-MB L2 cache)
493150-001	AMD Turion X2 Ultra Dual-Core ZM-86 2.4GHz processor (35W 2-MB L2 cache)
493151-001	14.1-inch, WXGA display assembly for use only with HP Compaq 6535s Notebook PC models
493152-001	14.1-inch, WXGA display assembly with camera for use only with HP Compaq 6535s Notebook PC models
493154-001	14.1-inch, WXGA BrightView display assembly for use only with HP Compaq 6535s Notebook PC models
493155-001	14.1-inch, WXGA BrightView display assembly with camera for use only with HP Compaq 6535s Notebook PC models
493158-001	1-GB memory module (PC2-5300, 667-MHz, DDR2) for use only with HP Compaq 6535s Notebook PC models
493159-001	2-GB memory module (PC2-5300, 667-MHz, DDR2) for use only with HP Compaq 6535s Notebook PC models

Spare part number	Description
493161-001	1-GB memory module (PC2-6400, 800-MHz, DDR2) for use only with HP Compaq 6535s Notebook PC models
493162-001	2-GB memory module (PC2-6400, 800-MHz, DDR2) for use only with HP Compaq 6535s Notebook PC models
493163-001	120-GB, 5400-rpm hard drive for use only with HP Compaq 6535s Notebook PC models (includes hard drive bracket)
493164-001	160-GB, 5400-rpm hard drive for use only with HP Compaq 6535s Notebook PC models (includes hard drive bracket)
493165-001	250-GB, 5400-rpm hard drive for use only with HP Compaq 6535s Notebook PC models (includes hard drive bracket)
493166-001	DVD-ROM Drive for use only with HP Compaq 6535s Notebook PC models (includes bezel and bracket)
493167-001	DVD/CD-RW Combo Drive for use only with HP Compaq 6535s Notebook PC models (includes bezel and bracket)
493168-001	DVD±RW Double-Layer Drive with LightScribe for use only with HP Compaq 6535s Notebook PC models (includes bezel and bracket)
493170-001	Display hinges (includes left and right hinges) for use only with HP Compaq 6535s Notebook PC models
493171-001	Webcam module (for use only with HP Compaq 6535 Notebook PC models)
493172-001	Base enclosure (includes rubber feet) for use only with HP Compaq 6535s Notebook PC models
493173-001	Speakers for use only with HP Compaq 6535s Notebook PC models
493174-001	Heat sink (for use only with HP Compaq 6535s Notebook PC models)
493175-001	Plastics Kit for use only with HP Compaq 6535s Notebook PC models (see <a href="#">Plastics Kit on page 25</a> for more Plastics Kit spare part information)
493176-001	Screw Kit for use only with HP Compaq 6535s Notebook PC models
493177-001	Fan for use only with HP Compaq 6535s Notebook PC models
493178-001	Logo Kit for use only with HP Compaq 6535s Notebook PC models
496679-001	Heat sink for use only with HP Compaq 6530s Notebook PC models
497613-001	System board (includes replacement thermal material and the ExpressCard assembly) for use only with computer models equipped with AMD processors
497614-001	Switch cover (includes power button board and cable) for use only with HP Compaq 6535s Notebook PC models
497615-001	Display inverter (includes cable) for use only with HP Compaq 6535s Notebook PC models
497616-001	Cable Kit for use only with HP Compaq 6535s Notebook PC models (includes RJ-11 (modem) cable, USB cable, and Bluetooth cable)
497617-001	Display bezel for use only with HP Compaq 6535s Notebook PC models equipped with a webcam
497619-001	Display bezel for use only with HP Compaq 6535s Notebook PC models not equipped with a webcam
497620-001	Display Cable Kit for use only with HP Compaq 6535s Notebook PC models (includes wireless antenna and webcam cables)
497622-001	Rubber Kit for use only with HP Compaq 6535s Notebook PC models (contains 7 computer feet and 8 display bezel screw covers)
500323-001	Display hardware kit for use only with HP Compaq 6535s Notebook PC models (includes screws, rubber bumper, display shield, and tape)

Spare part number	Description
500324-001	320-GB, 5400-rpm hard drive for use only with HP Compaq 6535s Notebook PC models (includes hard drive bracket)
501354-001	System board (includes replacement thermal material and the ExpressCard assembly) for use only with computer models equipped with Intel processors with UMA graphics subsystem and a GM45 system board
506281-001	AMD Athlon X2 QL-62 2.0GHz processor (35W 2-MB L2 cache) for use only with HP Compaq 6535s Notebook PC models
506282-001	AMD Turion X2 Dual-Core RM-72 2.1GHz (35W 1-MB L2 cache) for use only with HP Compaq 6535s Notebook PC models
506283-001	AMD Turion X2 Ultra Dual-Core ZM-84 2.3GHz processor (35W 2-MB L2 cache) for use only with HP Compaq 6535s Notebook PC models
506443-001	Intel Celeron M 575 2.0-GHz processor (1-MB L2 cache, 667-MHz FSB) for use only with HP Compaq 6530s and 6531s Notebook PC models
506444-001	Intel Celeron M 585 2.16-GHz processor (1-MB L2 cache, 667-MHz FSB) for use only with HP Compaq 6530s and 6531s Notebook PC models
506453-001	Intel Celeron Dual-Core T1600 1.66-GHz processor (1-MB L2 cache, 667-MHz FSB) for use only with HP Compaq 6530s and 6531s Notebook PC models
506454-001	Intel Celeron Dual-Core T1700 1.83-GHz processor (1-MB L2 cache, 667-MHz FSB) for use only with HP Compaq 6530s and 6531s Notebook PC models
506455-001	Intel Core2 Duo P7370 2.0-GHz processor (3.0-MB L2 cache, 1066-MHz FSB) for use only with HP Compaq 6530s and 6531s Notebook PC models
506456-001	160-GB, 7200-rpm hard drive for use only with HP Compaq 6530s and 6531s Notebook PC models (includes hard drive bracket)
507511-001	Intel Core2 Duo T5670 1.80-GHz processor (2-MB L2 cache, 800-MHz FSB) for use only with HP Compaq 6530s and 6531s Notebook PC models, but not available for Japan
507512-001	Intel Core2 Duo T5870 2.0-GHz processor (2-MB L2 cache, 800-MHz FSB) for use only with HP Compaq 6530s and 6531s Notebook PC models

---

## 4 Removal and replacement procedures

### Preliminary replacement requirements

#### Tools required

You will need the following tools to complete the removal and replacement procedures:

- Flat-bladed screwdriver
- Magnetic screwdriver
- Phillips P0 and P1 screwdrivers
- Torx T8 screwdriver

#### Service considerations

The following sections include some of the considerations that you must keep in mind during disassembly and assembly procedures.



---

**NOTE:** As you remove each subassembly from the computer, place the subassembly (and all accompanying screws) away from the work area to prevent damage.

---

#### Plastic parts

Using excessive force during disassembly and reassembly can damage plastic parts. Use care when handling the plastic parts. Apply pressure only at the points designated in the maintenance instructions.

## Cables and connectors

- 
- △ **CAUTION:** When servicing the computer, be sure that cables are placed in their proper locations during the reassembly process. Improper cable placement can damage the computer.
- 

Cables must be handled with extreme care to avoid damage. Apply only the tension required to unseat or seat the cables during removal and insertion. Handle cables by the connector whenever possible. In all cases, avoid bending, twisting, or tearing cables. Be sure that cables are routed in such a way that they cannot be caught or snagged by parts being removed or replaced. Handle flex cables with extreme care; these cables tear easily.

## Drive handling

- 
- △ **CAUTION:** Drives are fragile components that must be handled with care. To prevent damage to the computer, damage to a drive, or loss of information, observe these precautions:
- 

Before removing or inserting a hard drive, shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.

Before handling a drive, be sure that you are discharged of static electricity. While handling a drive, avoid touching the connector.

Before removing a diskette drive or optical drive, be sure that a diskette or disc is not in the drive and be sure that the optical drive tray is closed.

Handle drives on surfaces covered with at least one inch of shock-proof foam.

Avoid dropping drives from any height onto any surface.

After removing a hard drive, an optical drive, or a diskette drive, place it in a static-proof bag.

Avoid exposing a hard drive to products that have magnetic fields, such as monitors or speakers.

Avoid exposing a drive to temperature extremes or liquids.

If a drive must be mailed, place the drive in a bubble pack mailer or other suitable form of protective packaging and label the package "FRAGILE."

---

## Grounding guidelines

### Electrostatic discharge damage

Electronic components are sensitive to electrostatic discharge (ESD). Circuitry design and structure determine the degree of sensitivity. Networks built into many integrated circuits provide some protection, but in many cases, ESD contains enough power to alter device parameters or melt silicon junctions.

A discharge of static electricity from a finger or other conductor can destroy static-sensitive devices or microcircuitry. Even if the spark is neither felt nor heard, damage may have occurred.

An electronic device exposed to ESD may not be affected at all and can work perfectly throughout a normal cycle. Or the device may function normally for a while, then degrade in the internal layers, reducing its life expectancy.

- △ **CAUTION:** To prevent damage to the computer when you are removing or installing internal components, observe these precautions:

Keep components in their electrostatic-safe containers until you are ready to install them.

Use nonmagnetic tools.

Before touching an electronic component, discharge static electricity by using the guidelines described in this section.

Avoid touching pins, leads, and circuitry. Handle electronic components as little as possible.

If you remove a component, place it in an electrostatic-safe container.

The following table shows how humidity affects the electrostatic voltage levels generated by different activities.

- △ **CAUTION:** A product can be degraded by as little as 700 V.

Typical electrostatic voltage levels			
Event	Relative humidity		
	10%	40%	55%
Walking across carpet	35,000 V	15,000 V	7,500 V
Walking across vinyl floor	12,000 V	5,000 V	3,000 V
Motions of bench worker	6,000 V	800 V	400 V
Removing DIPS from plastic tube	2,000 V	700 V	400 V
Removing DIPS from vinyl tray	11,500 V	4,000 V	2,000 V
Removing DIPS from Styrofoam	14,500 V	5,000 V	3,500 V
Removing bubble pack from PCB	26,500 V	20,000 V	7,000 V
Packing PCBs in foam-lined box	21,000 V	11,000 V	5,000 V



## Packaging and transporting guidelines

Follow these grounding guidelines when packaging and transporting equipment:

- To avoid hand contact, transport products in static-safe tubes, bags, or boxes.
- Protect ESD-sensitive parts and assemblies with conductive or approved containers or packaging.
- Keep ESD-sensitive parts in their containers until the parts arrive at static-free workstations.
- Place items on a grounded surface before removing items from their containers.
- Always be properly grounded when touching a component or assembly.
- Store reusable ESD-sensitive parts from assemblies in protective packaging or nonconductive foam.
- Use transporters and conveyors made of antistatic belts and roller bushings. Be sure that mechanized equipment used for moving materials is wired to ground and that proper materials are selected to avoid static charging. When grounding is not possible, use an ionizer to dissipate electric charges.

## Workstation guidelines

Follow these grounding workstation guidelines:

- Cover the workstation with approved static-shielding material.
- Use a wrist strap connected to a properly grounded work surface and use properly grounded tools and equipment.
- Use conductive field service tools, such as cutters, screwdrivers, and vacuums.
- When fixtures must directly contact dissipative surfaces, use fixtures made only of static-safe materials.
- Keep the work area free of nonconductive materials, such as ordinary plastic assembly aids and Styrofoam.
- Handle ESD-sensitive components, parts, and assemblies by the case or PCM laminate. Handle these items only at static-free workstations.
- Avoid contact with pins, leads, or circuitry.
- Turn off power and input signals before inserting or removing connectors or test equipment.

## Equipment guidelines

Grounding equipment must include either a wrist strap or a foot strap at a grounded workstation.

- When seated, wear a wrist strap connected to a grounded system. Wrist straps are flexible straps with a minimum of one megohm  $\pm 10\%$  resistance in the ground cords. To provide proper ground, wear a strap snugly against the skin at all times. On grounded mats with banana-plug connectors, use alligator clips to connect a wrist strap.
- When standing, use foot straps and a grounded floor mat. Foot straps (heel, toe, or boot straps) can be used at standing workstations and are compatible with most types of shoes or boots. On conductive floors or dissipative floor mats, use foot straps on both feet with a minimum of one megohm resistance between the operator and ground. To be effective, the conductive strips must be worn in contact with the skin.

The following grounding equipment is recommended to prevent electrostatic damage:

- Antistatic tape
- Antistatic smocks, aprons, and sleeve protectors
- Conductive bins and other assembly or soldering aids
- Nonconductive foam
- Conductive tabletop workstations with ground cords of one megohm resistance
- Static-dissipative tables or floor mats with hard ties to the ground
- Field service kits
- Static awareness labels
- Material-handling packages
- Nonconductive plastic bags, tubes, or boxes
- Metal tote boxes
- Electrostatic voltage levels and protective materials

The following table lists the shielding protection provided by antistatic bags and floor mats.

Material	Use	Voltage protection level
Antistatic plastic	Bags	1,500 V
Carbon-loaded plastic	Floor mats	7,500 V
Metallized laminate	Floor mats	5,000 V

## Unknown user password

If the computer you are servicing has an unknown user password, follow these steps to clear the password:



---

**NOTE:** These steps also clear CMOS.

---

1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).
5. Remove the real-time clock (RTC) battery (see [RTC battery on page 75](#)).
6. Wait approximately 5 minutes.
7. Replace the RTC battery and reassemble the computer.
8. Connect AC power to the computer. Do not reinsert any batteries at this time.
9. Turn on the computer.

All passwords and all CMOS settings have been cleared.

## Component replacement procedures

This section provides removal and replacement procedures.

There are as many as 89 screws, in 15 different sizes, that must be removed, replaced, or loosened when servicing the computer. Make special note of each screw size and location during removal and replacement.

### Service tag

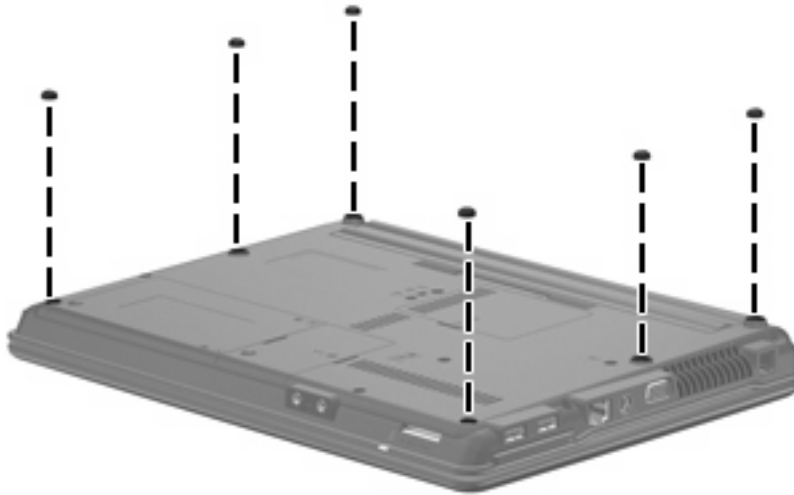
The service tag, affixed to the bottom of the computer, provides information that may be needed when troubleshooting system problems. The service tag provides the following information:

- (1) Product name: This is the product name affixed to the front of the computer.
- (2) Serial number (s/n): This is an alphanumeric identifier that is unique to each product.
- (3) Part number/Product number (p/n): This number provides specific information about the product's hardware components. The part number helps a service technician to determine what components and parts are needed.
- (4) Model description: This is the number used to locate documents, drivers, and support for the computer.
- (5) Warranty period: Describes the duration of the warranty period for this computer.



## Computer feet

The computer feet are adhesive-backed rubber pads. The feet are included in the Rubber Kit, spare part numbers 497622-001 (for use only with HP Compaq 6535s Notebook PC models) and 491654-001 (for use only with HP Compaq 6530s and 6531s Notebook PC models). There are 6 rubber feet that attach to the base enclosure in the locations illustrated below.



## Battery

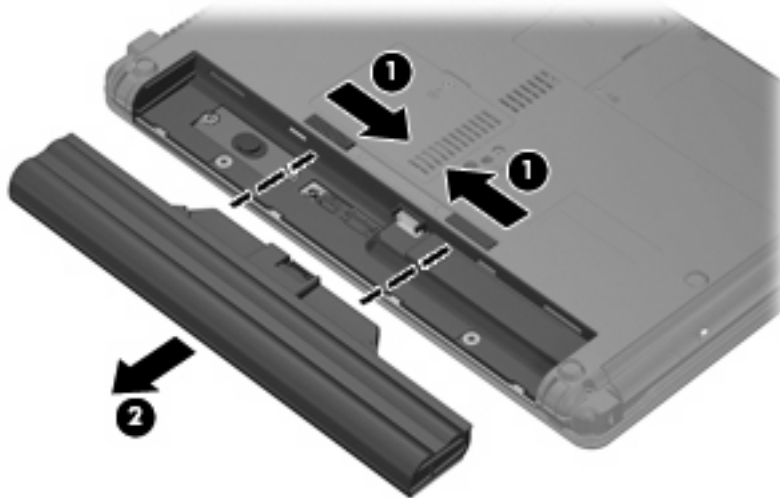
Description	Spare part number
<b>6-cell, 47-Wh Li-ion battery</b>	
For use only with HP Compaq 6535s Notebook PC models	456864-001
For use only with HP Compaq 6530s and 6531s Notebook PC models	491657-001

Before disassembling the computer, follow these steps:

1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.

Remove the battery:

1. Turn the computer upside down on a flat surface, with the battery bay toward you.
2. Slide the battery release latches **(1)** to release the battery.
3. Remove the battery **(2)** from the computer.



Install the battery by inserting it into the battery bay until you hear a click.

## Hard drive



**NOTE:** All hard drive spare part kits include a hard drive bracket.

Description	Spare part number
<b>For use only with HP Compaq 6535s Notebook PC models</b>	
320-GB, 5400-rpm hard drive	500324-001
250-GB, 5400-rpm hard drive	493165-001
160-GB, 5400-rpm hard drive	493164-001
120-GB, 5400-rpm hard drive	493163-001
<b>For use only with HP Compaq 6530s and 6531s Notebook PC models</b>	
250-GB, 5400-rpm hard drive	491647-001
160-GB, 7200-rpm hard drive	506456-001
160-GB, 5400-rpm hard drive	491646-001
120-GB, 7200-rpm hard drive	491645-001
120-GB, 5400-rpm hard drive	491644-001

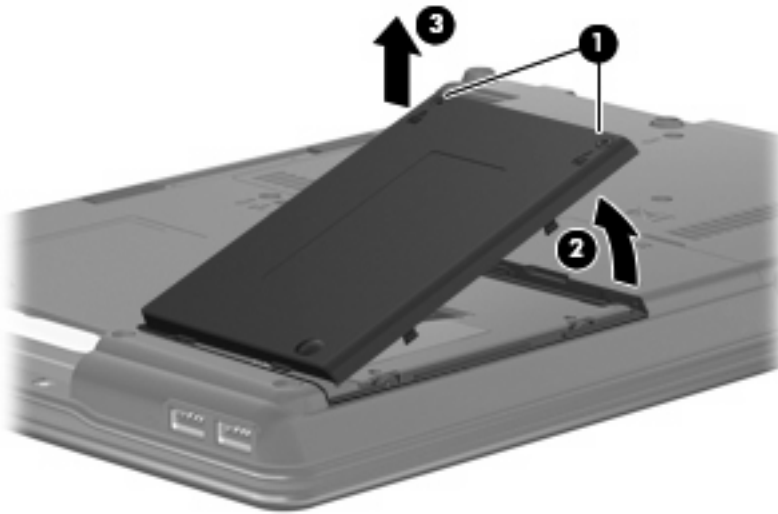
Before removing the hard drive, follow these steps:

1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).

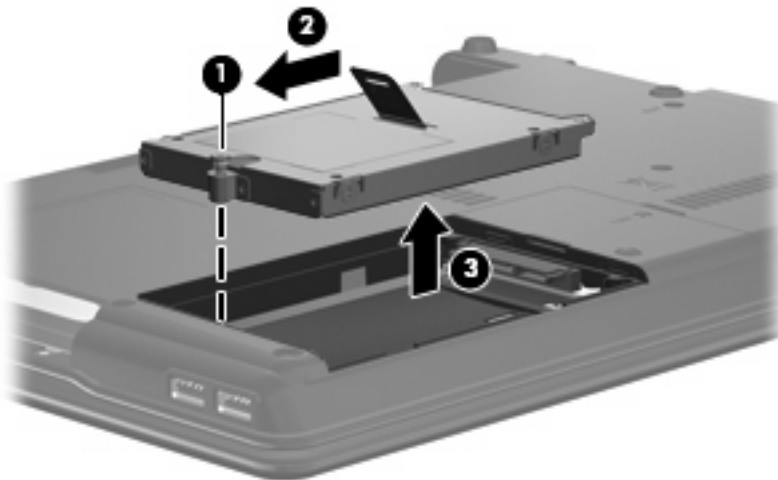
Remove the hard drive:

1. Position the computer with the front toward you.
2. Loosen the two Phillips PM2.5×6.0 captive screws **(1)** that secure the hard drive bay cover to the computer.

3. Lift the right side of the hard drive bay cover (2), swing it to the left, and remove the cover (3). The hard drive bay cover is included in the Plastics Kit, spare part numbers 493175-001 (for use only with HP Compaq 6535s Notebook PC models) and 491253-001 (for use only with HP Compaq 6530s and 6531s Notebook PC models).



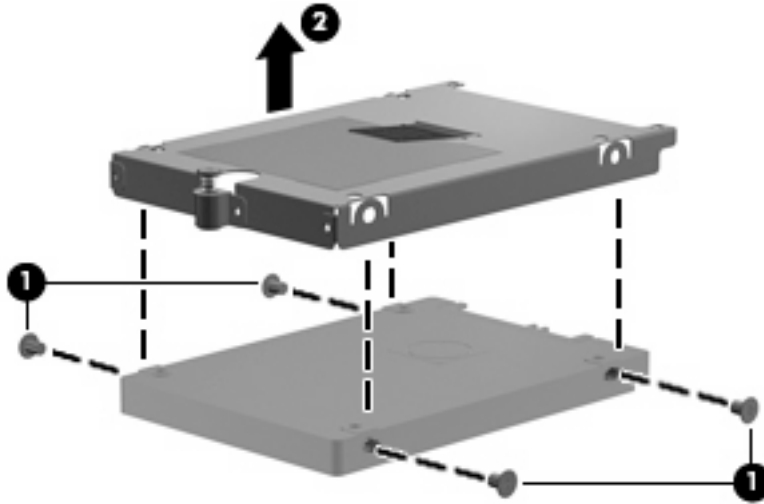
4. Loosen the Phillips PM2.5×10.0 captive screw (1) that secures the hard drive to the computer.
5. Grasp the Mylar tab (2) on the hard drive and slide the hard drive to the left to disconnect it from the system board.
6. Remove the hard drive (3) from the hard drive bay.



7. If it is necessary to replace the hard drive bracket, remove the two Phillips PM3.0×4.0 hard drive bracket screws (1) from each side of the hard drive.



8. Lift the bracket **(2)** straight up to remove it from the hard drive.



Reverse this procedure to reassemble and install the hard drive.

## WLAN module

Description	Spare part number
<b>Broadcom 802.11a/b/g/n WLAN modules:</b>	
<ul style="list-style-type: none"> <li>Broadcom 4321 802.11a/b/g/n WLAN module for use in Antigua and Barbuda, Barbados, Belize, Canada, the Cayman Islands, Guam, Puerto Rico, Trinidad and Tobago, the U.S. Virgin Islands, and the United States</li> </ul>	453730-001
<ul style="list-style-type: none"> <li>Broadcom 4321 802.11a/b/g/n WLAN module for use in Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, the Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bermuda, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, the British Virgin Islands, Brunei, Bulgaria, Burkina Faso, Burundi, Cameroon, Cape Verde, the Central African Republic, Chad, Chile, the People's Republic of China, Colombia, Comoros, the Congo, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, Djibouti, Dominica, the Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, French Guiana, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece, Grenada, Guadeloupe, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Ireland, Israel, Italy, the Ivory Coast, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, the Maldives, Mali, Malta, the Marshall Islands, Martinique, Mauritania, Mauritius, Mexico, Micronesia, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nauru, Nepal, the Nether Antilles, the Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Poland, Portugal, the Republic of Moldova, Romania, Russia, Rwanda, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, the Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, the Solomon Islands, Somalia, South Africa, South Korea, Spain, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Swaziland, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, the United Arab Emirates, the United Kingdom, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Zaire, Zambia, and Zimbabwe</li> </ul>	453730-002
<ul style="list-style-type: none"> <li>Broadcom 4321 802.11a/b/g/n WLAN module for use only in Japan</li> </ul>	453730-291
<ul style="list-style-type: none"> <li>Broadcom 4322 802.11a/b/g/n WLAN module for use in Antigua and Barbuda, Barbados, Belize, Canada, the Cayman Islands, Guam, Puerto Rico, Trinidad and Tobago, the U.S. Virgin Islands, and the United States</li> </ul>	487330-001
<ul style="list-style-type: none"> <li>Broadcom 4322 802.11a/b/g/n WLAN module for use in Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, the Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bermuda, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, the British Virgin Islands, Brunei, Bulgaria, Burkina Faso, Burundi, Cameroon, Cape Verde, the Central African Republic, Chad, Chile, the People's Republic of China, Colombia, Comoros, the Congo, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, Djibouti, Dominica, the Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, French Guiana, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece, Grenada, Guadeloupe, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Ireland, Israel, Italy, the Ivory Coast, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, the Maldives, Mali, Malta, the Marshall Islands, Martinique, Mauritania, Mauritius, Mexico, Micronesia, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nauru, Nepal, the Nether Antilles, the Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Poland, Portugal, the Republic of Moldova, Romania, Russia, Rwanda, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, the Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, the Solomon Islands, Somalia, South Africa, South Korea, Spain, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Swaziland, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, the United Arab Emirates, the United Kingdom, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Zaire, Zambia, and Zimbabwe</li> </ul>	487330-002

Description	Spare part number
<b>Broadcom 802.11b/g WLAN modules:</b>	
<ul style="list-style-type: none"> <li>Broadcom BCM4312 802.11b/g WLAN module for use in Antigua and Barbuda, Barbados, Belize, Canada, the Cayman Islands, Guam, Puerto Rico, Trinidad and Tobago, the U.S. Virgin Islands, and the United States</li> </ul>	459263-001
<ul style="list-style-type: none"> <li>Broadcom BCM4312 802.11b/g WLAN module for use in Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, the Bahamas, Bahrain, Bangladesh, Barbados, Belarus, Belgium, Belize, Benin, Bermuda, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, the British Virgin Islands, Brunei, Bulgaria, Burkina Faso, Burundi, Cameroon, Cape Verde, the Central African Republic, Chad, Chile, the People's Republic of China, Colombia, Comoros, the Congo, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, Djibouti, Dominica, the Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, French Guiana, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece, Grenada, Guadeloupe, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Ireland, Israel, Italy, the Ivory Coast, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kyrgyzstan, Laos, Latvia, Lebanon, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, Malaysia, the Maldives, Mali, Malta, the Marshall Islands, Martinique, Mauritania, Mauritius, Mexico, Micronesia, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nauru, Nepal, the Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, the Philippines, Poland, Portugal, the Republic of Moldova, Romania, Russia, Rwanda, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, the Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, the Solomon Islands, Somalia, South Africa, South Korea, Spain, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Swaziland, Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, Ukraine, the United Arab Emirates, the United Kingdom, Uruguay, Uzbekistan, Vanuatu, Venezuela, Vietnam, Yemen, Zaire, Zambia, and Zimbabwe</li> </ul>	459263-002
<b>Intel 802.11a/b/g WLAN module:</b>	
<ul style="list-style-type: none"> <li>Intel Wi-Fi Link 5100 802.11a/b/g WLAN module for use in all countries and regions</li> </ul>	482957-001
<b>Intel 802.11a/b/g/n WLAN module:</b>	
<ul style="list-style-type: none"> <li>Intel Wi-Fi Link 5100 802.11a/b/g/n WLAN module for use in all countries and regions</li> </ul>	480985-001
<b>Broadcom 802.11a/b/g WLAN modules:</b>	
<ul style="list-style-type: none"> <li>Broadcom 4311AG 802.11a/b/g WLAN module for use in Canada, the Cayman Islands, Guam, Puerto Rico, the U.S. Virgin Islands, and the United States</li> </ul>	441075-001
<ul style="list-style-type: none"> <li>Broadcom 4311AG 802.11a/b/g WLAN module for use in Afghanistan, Albania, Algeria, Andorra, Angola, Antigua and Barbuda, Argentina, Armenia, Aruba, Australia, Austria, Azerbaijan, the Bahamas, Bahrain, Bangladesh, Barbados, Belgium, Belize, Benin, Bermuda, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, the British Virgin Islands, Brunei, Bulgaria, Burkina Faso, Burundi, Cameroon, Cape Verde, the Cayman Islands, the Central African Republic, Chad, Chile, Colombia, Comoros, the Congo, Costa Rica, Croatia, Cyprus, the Czech Republic, Denmark, Djibouti, Dominica, the Dominican Republic, East Timor, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Estonia, Ethiopia, Fiji, Finland, France, French Guiana, Gabon, Gambia, Georgia, Germany, Ghana, Gibraltar, Greece, Guadeloupe, Guam, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, Hong Kong, Hungary, Iceland, India, Ireland, Italy, the Ivory Coast, Jamaica, Jordan, Kenya, Kiribati, Kyrgyzstan, Laos, Latvia, Lesotho, Liberia, Liechtenstein, Lithuania, Luxembourg, Macedonia, Madagascar, Malawi, the Maldives, Mali, Malta, the Marshall Islands, Martinique, Mauritania, Mauritius, Mexico, Micronesia, Monaco, Mongolia, Montenegro, Morocco, Mozambique, Namibia, Nauru, Nepal, the Netherlands, New Zealand, Nicaragua, Niger, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, the People's Republic of China, Peru, the Philippines, Poland, Portugal, Puerto Rico, the Republic of Moldova, Romania, Russia, Rwanda, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia, the Seychelles, Sierra Leone, Singapore, Slovakia, Slovenia, the Solomon Islands, Somalia, South Africa, Spain, Sri Lanka, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname, Swaziland,</li> </ul>	441075-002

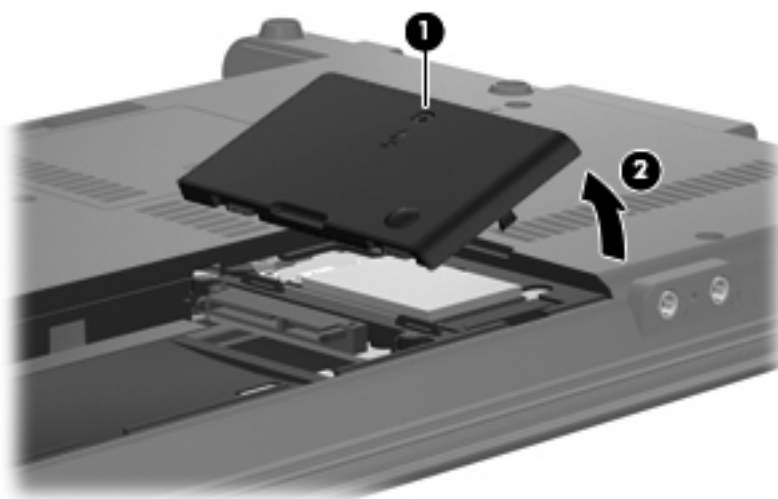
Description	Spare part number
Sweden, Switzerland, Taiwan, Tajikistan, Tanzania, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkey, Turkmenistan, Tuvalu, Uganda, the United Arab Emirates, the United Kingdom, Uruguay, Uzbekistan, Venezuela, Vietnam, Yemen, Zaire, Zambia, and Zimbabwe	
<ul style="list-style-type: none"> <li>Broadcom 4311AG 802.11a/b/g WLAN module for use in Japan</li> </ul>	441075-291

Before removing the WLAN module, follow these steps:


1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).

Remove the WLAN module:

1. Position the computer with the front toward you.
2. Loosen the Phillips PM2.5×6.0 captive screw (1) that secures the WLAN module compartment cover to the computer.
3. Lift the right side of the WLAN module compartment cover (2), swing it to the left, and remove the cover. The WLAN module compartment cover is included in the Plastics Kit, spare part numbers 493175-001 (for use only with HP Compaq 6535s Notebook PC models) and 491253-001 (for use only with HP Compaq 6530s and 6531s Notebook PC models).




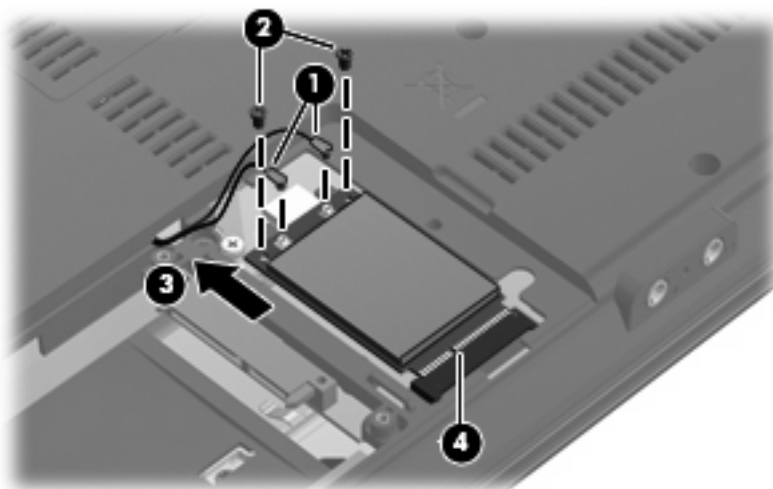
4. Disconnect the WLAN antenna cables (1) from the terminals on the WLAN module.

 **NOTE:** The black WLAN antenna cable is connected to the WLAN module “Main” terminal. The white WLAN antenna cable is connected to the WLAN module “Aux” terminal.

5. Remove the two Phillips PM2.5×4.0 screws (2) that secure the WLAN module to the computer. (The edge of the module opposite the slot rises away from the computer.)

6. Remove the WLAN module (3) by pulling the module away from the slot at an angle.

 **NOTE:** WLAN modules are designed with a notch (4) to prevent incorrect insertion into the WLAN module slot.



Reverse this procedure to install the WLAN module.

## Memory module

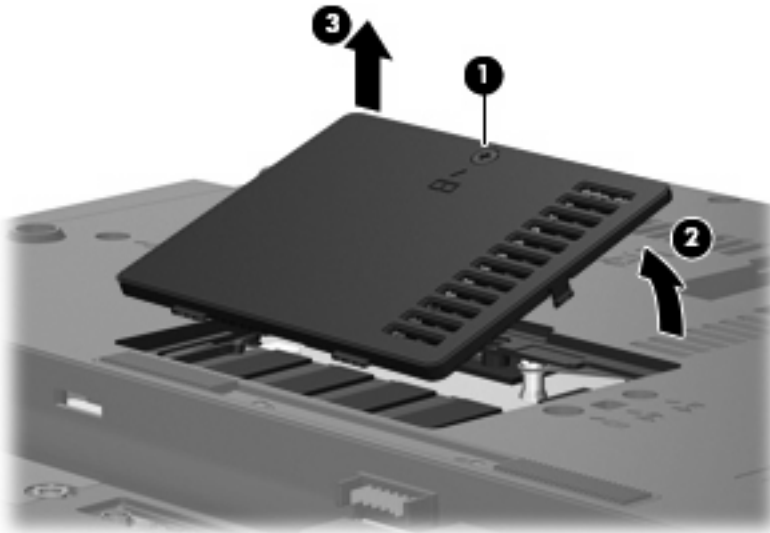
Description	Spare part number
<b>For use only with HP Compaq 6535s Notebook PC models</b>	
2-GB (PC2-6400)	493162-001
1-GB (PC2-6400)	493161-001
2-GB (PC2-5300, 667-MHz, DDR2)	493159-001
1-GB (PC2-5300)	493158-001
<b>For use only with HP Compaq 6530s and 6531s Notebook PC models</b>	
1-GB (PC2-5300)	491623-001
1-GB (PC2-6400)	491624-001
2-GB (PC2-5300)	491625-001
2-GB (PC2-6400)	491626-001

Before removing the memory module, follow these steps:


1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).

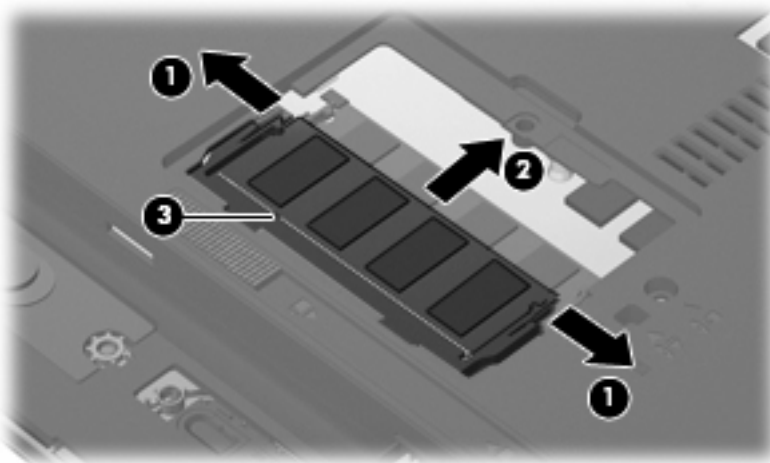
Remove the memory module:

1. Loosen the Phillips PM2.5×6.0 captive screw (1) that secures the memory module compartment cover to the computer.
2. Lift the front edge of the cover (2), swing it up and back, and remove the cover (3). The memory module compartment cover is included in the Plastics Kit, spare part numbers 493175-001 (for use only with HP Compaq 6535s Notebook PC models) and 491253-001 (for use only with HP Compaq 6530s and 6531s Notebook PC models).



3. Spread the retaining tabs (1) on each side of the memory module slot to release the memory module. (The edge of the module opposite the slot rises away from the computer.)
4. Remove the memory module (2) by pulling the module away from the slot at an angle.

 **NOTE:** Memory modules are designed with a notch (3) to prevent incorrect insertion into the memory module slot.



Reverse this procedure to install a memory module.

## Optical drive



**NOTE:** All optical drive spare part kits include an optical drive bezel.

Description	Spare part number
<b>For use only with HP Compaq 6535s Notebook PC models</b>	
DVD±RW Double-Layer Drive with LightScribe	493168-001
DVD/CD-RW Combo Drive	493167-001
DVD-ROM Drive	493166-001
<b>For use only with HP Compaq 6530s and 6531s Notebook PC models</b>	
Blu-ray Disc ROM with SuperMulti DVD±R/RW Double-Layer	491652-001
DVD±RW Double-Layer Drive with LightScribe	491651-001
DVD±RW and CD-RW Combo Drive, Double-Layer	491650-001
DVD-ROM Drive	491649-001

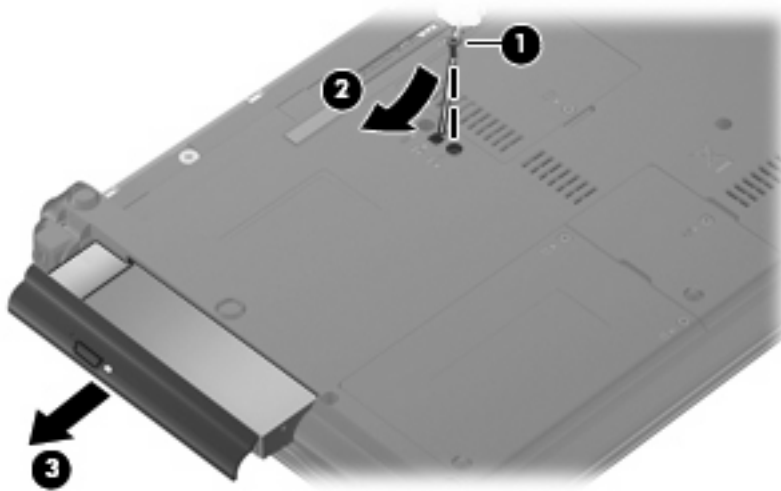
Before removing the optical drive, follow these steps:

1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).

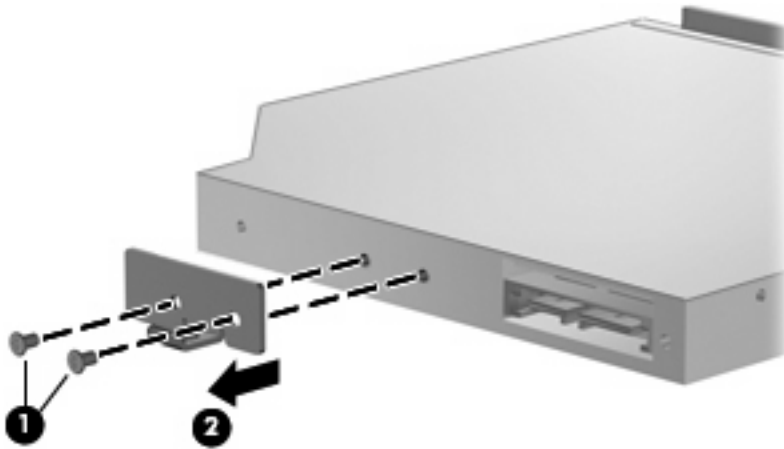
Remove the optical drive:

1. Position the computer with the right side toward you.
2. Remove the slotted Torx ST8M2.5×7.0 screw **(1)** that secures the optical drive to the computer.
3. Insert a flat-bladed screwdriver or similar tool into the optical drive tab access **(2)** and press the tab to the left to release the optical drive from the computer.

4. Remove the optical drive **(3)** from the computer.



5. If it is necessary to replace the optical drive bracket, position the optical drive with the rear toward you.
6. Remove the two Phillips PM2.0×3.0 screws **(1)** that secure the optical drive bracket to the optical drive.
7. Remove the optical drive bracket **(2)**.



Reverse this procedure to reassemble and install an optical drive.



## Switch cover and keyboard

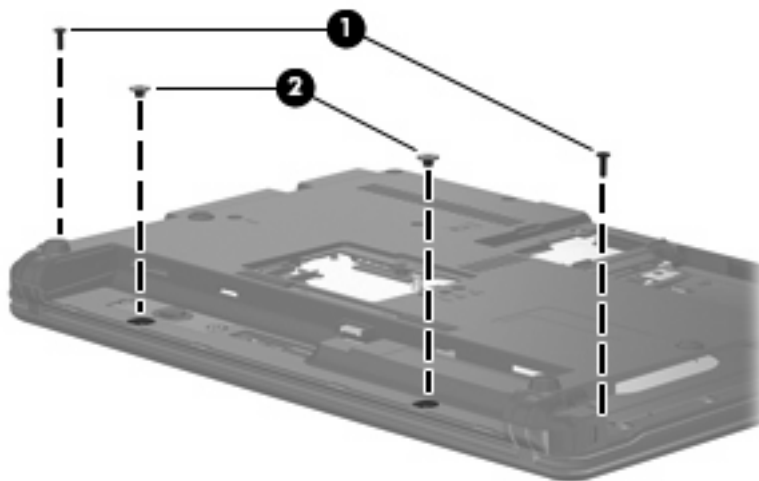
Description		Spare part number	
Switch covers (includes power button board and cable)			
For use only with HP Compaq 6535s Notebook PC models		497614-001	
For use only with HP Compaq 6530s and 6531s Notebook PC models		491663-001	
Keyboards for use in the following countries or regions:			
Brazil	491653-201	Taiwan	491653-AB1
Japan	491653-291	Thailand	491653-281
Latin America	491653-161	The United States	491653-001
South Korea	491653-AD1		

Before removing the switch cover and keyboard, follow these steps:

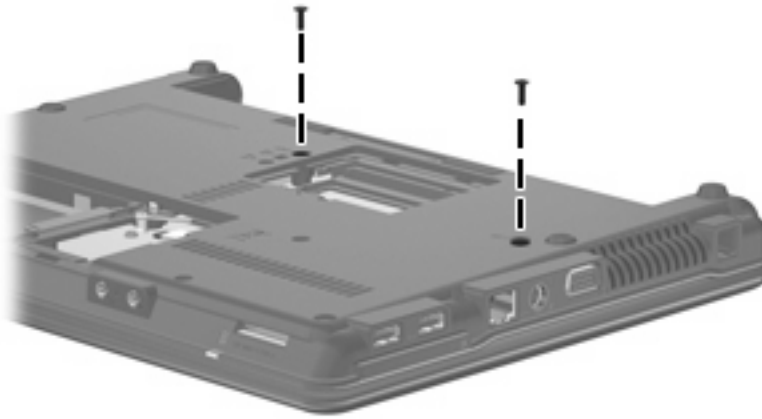
1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).

Remove the switch cover and keyboard:

1. Remove the following screws:
  - (1) Two slotted Torx ST8M2.5×7.0 screws
  - (2) Two Torx T8M2.0×2.0 broadhead (9-mm) screws



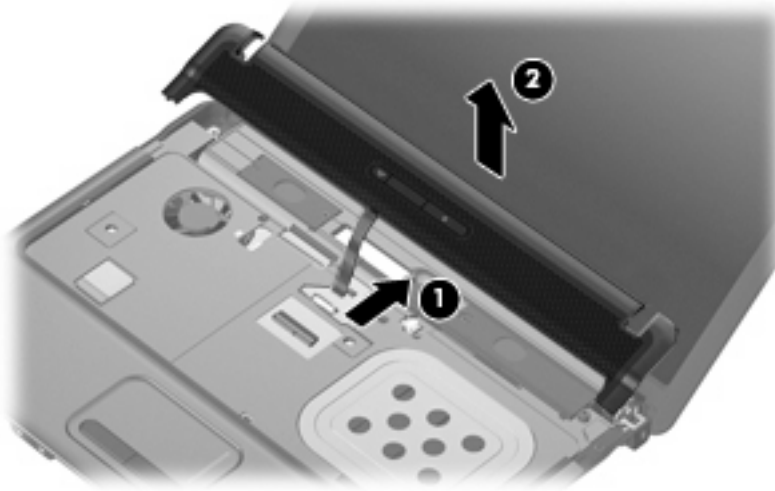
2. Remove the two slotted Torx ST8M2.5×7.0 screws that secure the keyboard to the computer.



3. Turn the computer display-side up, with the front toward you.
4. Open the computer as far as possible.
5. Lift the switch cover (1) straight up until it disengages from the computer, and slide it back (2) until it rests on the display assembly.



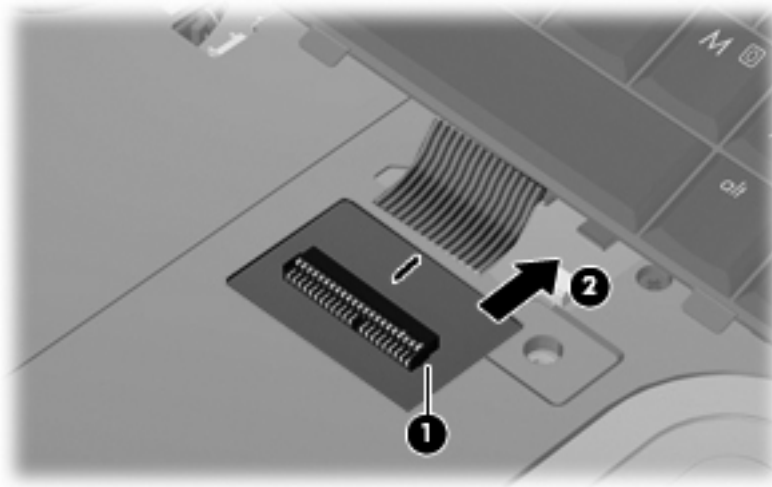
6. Release the zero insertion force (ZIF) connector to which the LED board cable is attached, disconnect the LED board cable from the system board (1), and lift the switch cover up to remove it (2) from the system board.



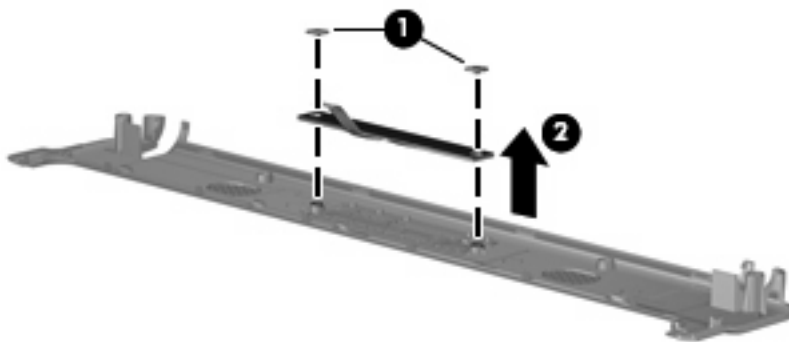
7. To disengage the four tabs (1) on the back of the keyboard from the switch cover, lift up the rear edge of the keyboard (2), and slide it back (3).



8. Release the swinging ZIF connector (1) to which the keyboard cable is attached, and disconnect the keyboard cable (2) from the system board.



9. Remove the keyboard.
10. Turn the switch cover over.
11. Remove the two Phillips PM2.0×2.0 broadhead screws (1) from the switch cover.
12. Remove the LED power button board (2) from the switch cover.



Reverse this procedure to install the switch cover and keyboard.

## Speakers


Description	Spare part number
For use only with HP Compaq 6535s Notebook PC models	493173-001
For use only with HP Compaq 6530s and 6531s Notebook PC models	491656-001

Before removing the speakers, follow these steps:

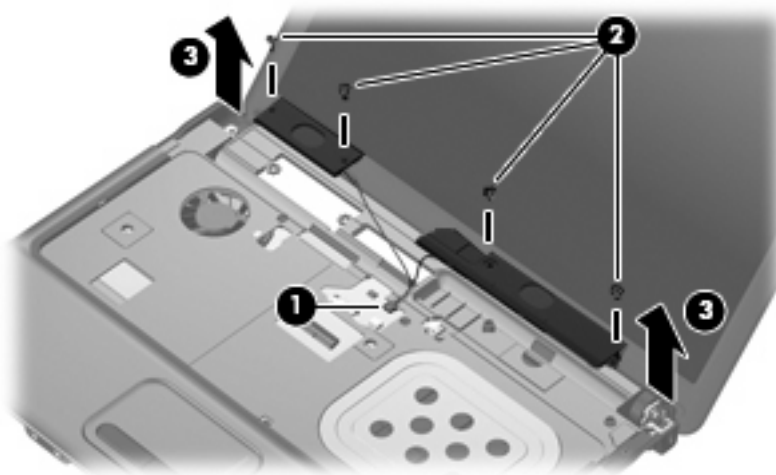
1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).
5. Remove the switch cover (see [Switch cover and keyboard on page 57](#)).
6. Remove the keyboard (see [Switch cover and keyboard on page 57](#)).

Remove the speakers:

1. Disconnect the speaker cable (1) from the system board and remove the speaker cable from the clips and routing channel.

 **NOTE:** The two speakers are connected with a single cable.

2. Remove the four Phillips PM2.5×4.0 screws (2) that secure the speakers to the top cover.
3. Remove the speakers (3) from the top cover.



Reverse this procedure to install the speakers.

## Display assembly



**NOTE:** All display assembly spare part kits include 2 WLAN antenna transceivers and cables.

Description	Spare part number
<b>For use only with HP Compaq 6535s Notebook PC models</b>	
14.1-inch, WXGA BrightView display assembly with camera	493155-001
14.1-inch, WXGA BrightView display assembly	493154-001
14.1-inch, WXGA display assembly with camera	493152-001
14.1-inch, WXGA display assembly	493151-001
<b>For use only with HP Compaq 6530s and 6531s Notebook PC models</b>	
14.1-inch, WXGA BrightView display assembly with camera	491643-001
14.1-inch, WXGA display assembly with camera	491642-001
14.1-inch, WXGA BrightView display assembly	491641-001
14.1-inch, WXGA display assembly	491640-001

Before removing the display assembly, follow these steps:

1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).
5. Remove the following components:
  - a. Switch cover (see [Switch cover and keyboard on page 57](#))
  - b. Keyboard (see [Switch cover and keyboard on page 57](#))
  - c. Speakers (see [Speakers on page 61](#))

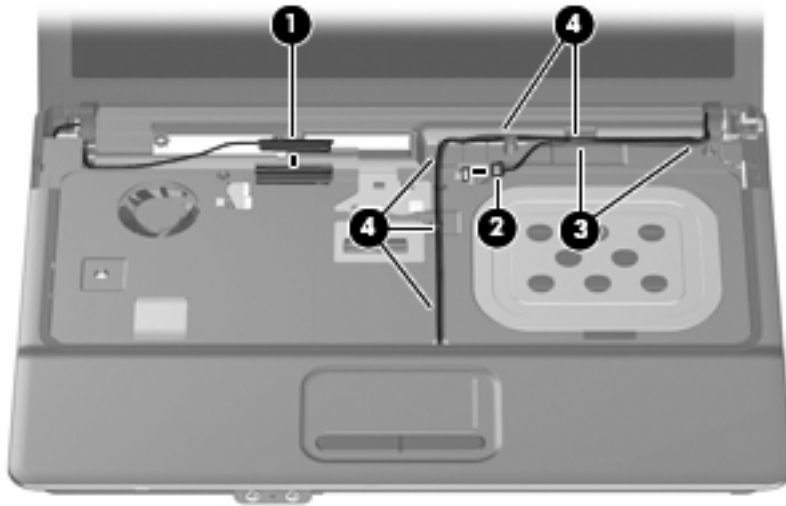
Remove the display cable:

1. Turn the computer right-side up, with the front toward you.
2. Open the computer as far as possible.
3. Disconnect the display panel cable **(1)** from the system board.

△ **CAUTION:** There is a ground loop off the display panel cable that is secured to the left hinge. Be sure you do not pull or damage the cable.

4. Disconnect the camera and microphone module cables **(2)** from the system board, and then remove the cables from the routing path **(3)**.

5. Remove the wireless antenna cables (4) from the clips and routing channels built into the top cover.



Remove the display assembly:

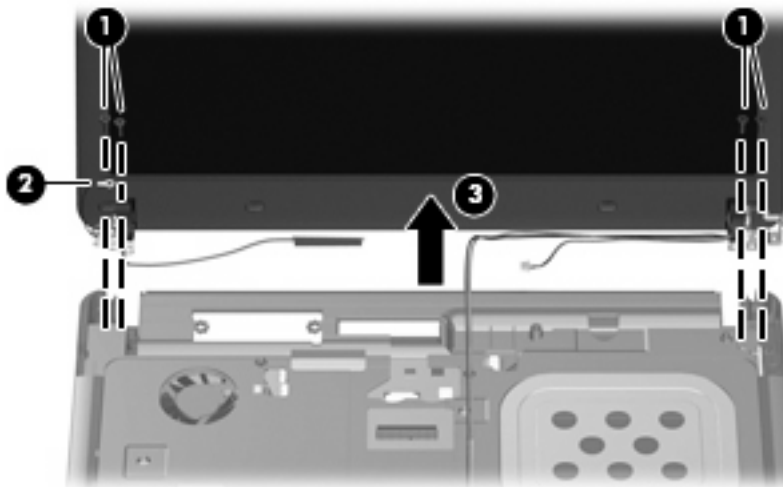
1. Remove the following:

△ **CAUTION:** The display assembly will be unsupported when the following screws are removed. To prevent damage to the display assembly, support it before removing the screws.

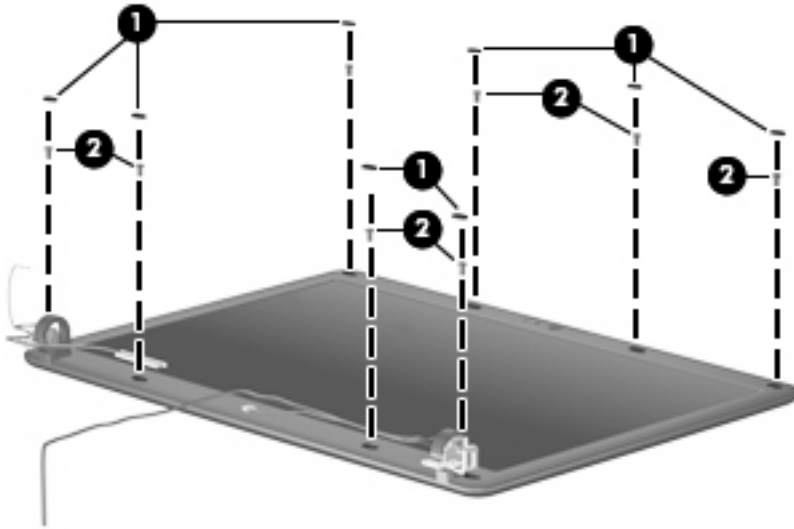
(1) Four slotted Torx ST8M2.5×7.0 screws that secure the display assembly to the computer.

△ **CAUTION:** There is a ground loop off the display panel cable (2) that is secured to the left hinge. Be sure you do not pull or damage the cable.

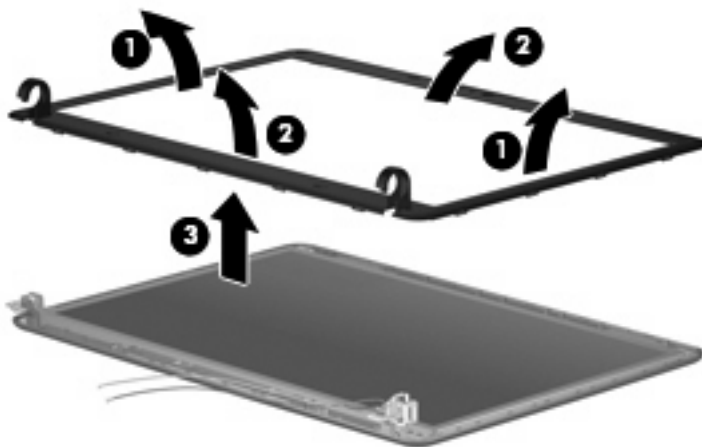
(3) Lift the display assembly straight up and remove it.



2. If it is necessary to replace the display bezel, display inverter, or display hinges, remove the eight rubber screw covers **(1)** and the eight Torx T8M2.5×6.0 screws **(2)** that secure the display bezel to the display assembly. The rubber screw covers are available in the Rubber Kit, spare part numbers 497622-001 (for use only with HP Compaq 6535s Notebook PC models) and 491654-001 (for use only with HP Compaq 6530s and 6531s Notebook PC models).

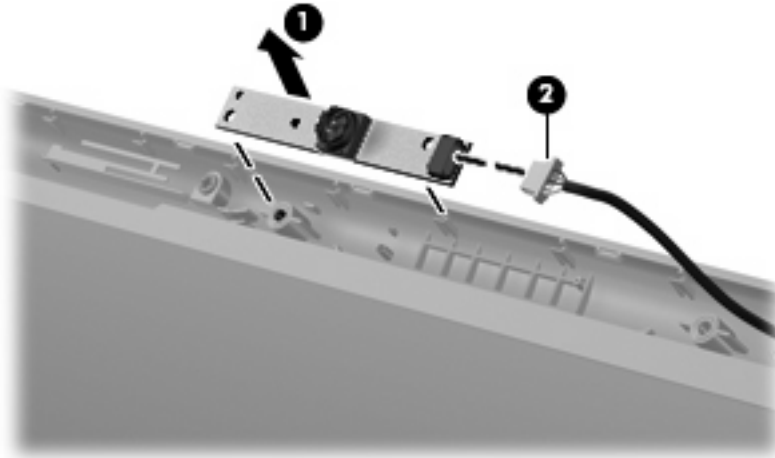



3. Flex the inside edges of the left and right sides **(1)** and the top and bottom sides **(2)** of the display bezel until the bezel disengages from the display enclosure.
4. Remove the display bezel **(3)**. The display bezel is available using spare part numbers 497619-001 (for use only with HP Compaq 6535s Notebook PC models without a webcam), 497617-001 (for use only with HP Compaq 6535s Notebook PC models with a webcam), 491636-001 (for use only with HP Compaq 6530s and 6531s Notebook PC models with a webcam), and 491635-001 (for use only with HP Compaq 6530s and 6531s Notebook PC models without a webcam).



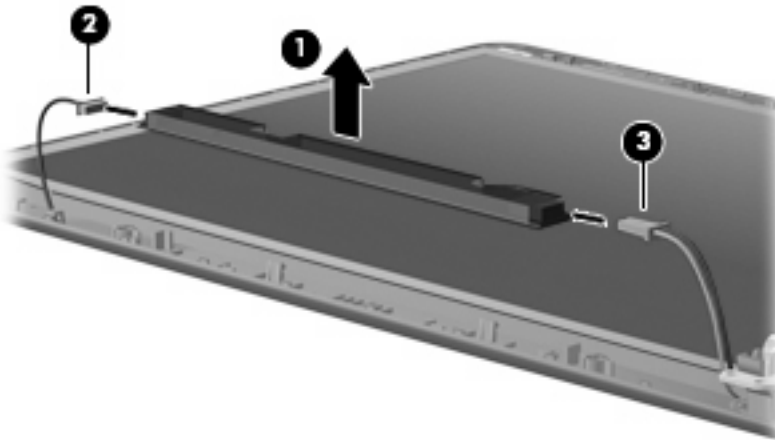


5. If it is necessary to replace the webcam module from the display enclosure, gently pull the webcam module from the double-sided tape on the display enclosure **(1)** and disconnect the webcam cable from the module **(2)**. The webcam module can be ordered by using spare part numbers 491630-001 (for use only with HP Compaq 6530s and 6531s Notebook PC models) and 493171-001 (for use only with HP Compaq 6535s Notebook PC models).



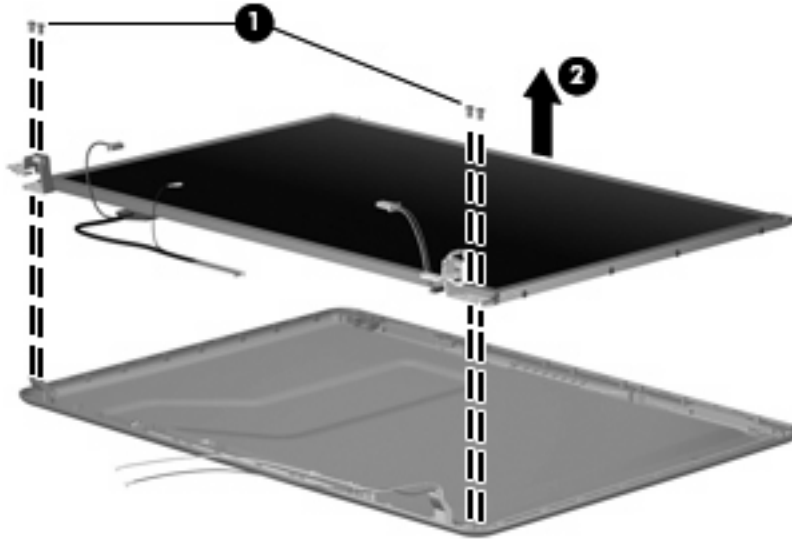
 **NOTE:** To replace the webcam module in the display enclosure, align the holes on the webcam module with the pins on the display enclosure and press onto the double-sided tape.

6. If it is necessary to replace the display inverter, remove the inverter **(1)** from the display enclosure as far as the display panel cable and the backlight cable will allow.
7. Disconnect the display panel cable **(2)** and the backlight cable **(3)** from the display inverter.




8. Remove the display inverter. The display inverter is available using spare part numbers 497615-001 (for use only with HP Compaq 6535s Notebook PC models) and 491634-001 (for use only with HP Compaq 6530s and 6531s Notebook PC models).
9. If it is necessary to replace the display hinges, remove the four Torx T8M2.5×5.0 screws **(1)** that secure the display panel to the display enclosure.

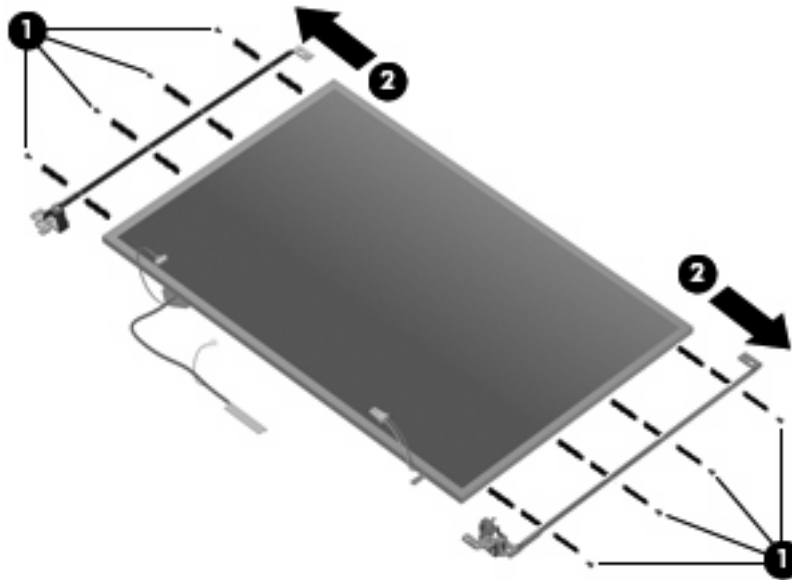
10. Remove the display panel (2).



11. Remove the four Phillips PM2.0×3.0 screws (1) that secure each display hinge to the display panel.

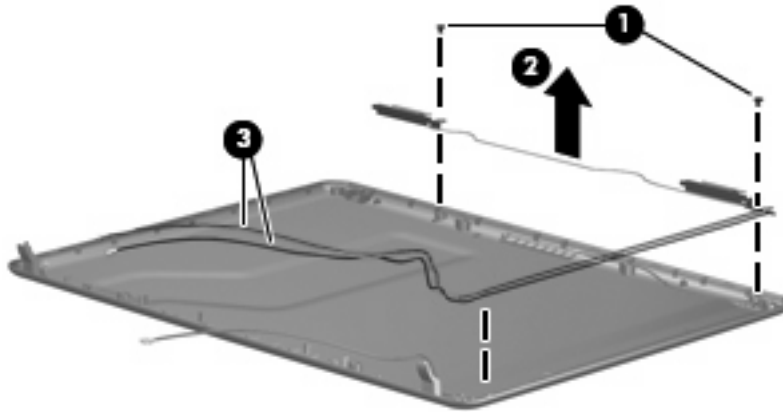
 **NOTE:** When removing or replacing the eight Phillips screws, be sure to remove or replace them in the same sequence as the numbering found on the display hinges (1–2–3–4).

12. Remove the display hinges (2). The left and right display hinges are available in the Bracket Kit, spare part numbers 493170-001 (for use only with HP Compaq 6535s Notebook PC models) and 491639-001 (for use only with HP Compaq 6530s and 6531s Notebook PC models).

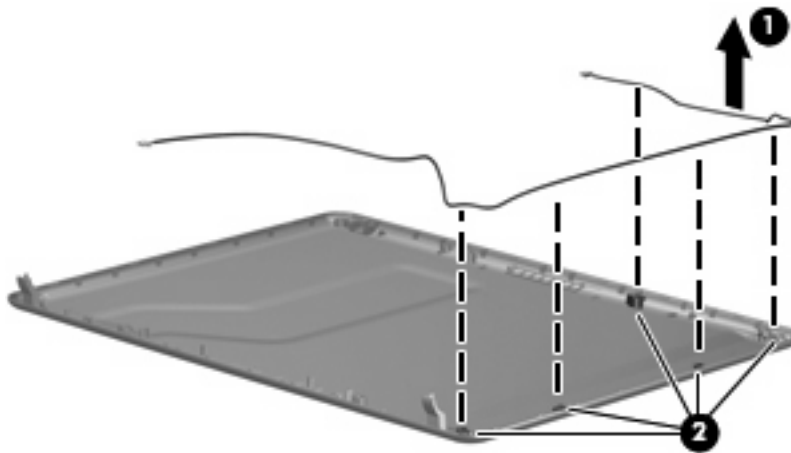


13. If it is necessary to replace the wireless antenna cables, remove the two Torx T8M2.5×4.0 screws (1) that secure the wireless antenna transceiver to the top cover. The wireless antenna cables are included in the Display Cable Kit, spare part numbers 497620-001 (for use only with HP Compaq 6535s Notebook PC models) and 491637-001 (for use only with HP Compaq 6530s and 6531s Notebook PC models).

14. Remove the wireless antenna (2).
15. Remove the wireless antenna cables (3) from the clips and routing channels built into the top cover.



16. If it is necessary to replace the webcam cable from the display enclosure, gently pull the webcam cables (1) from the clips and routing channels (2) built into the top cover. The webcam cable is included in the Display Cable Kit, spare part numbers 497620-001 (for use only with HP Compaq 6535s Notebook PC models) and 491637-001 (for use only with HP Compaq 6530s and 6531s Notebook PC models).



Reverse this procedure to reassemble and install the display assembly.

## Top cover

Description	Spare part number
Top cover (includes TouchPad board and cable, and TouchPad button board and cable)	491632-001

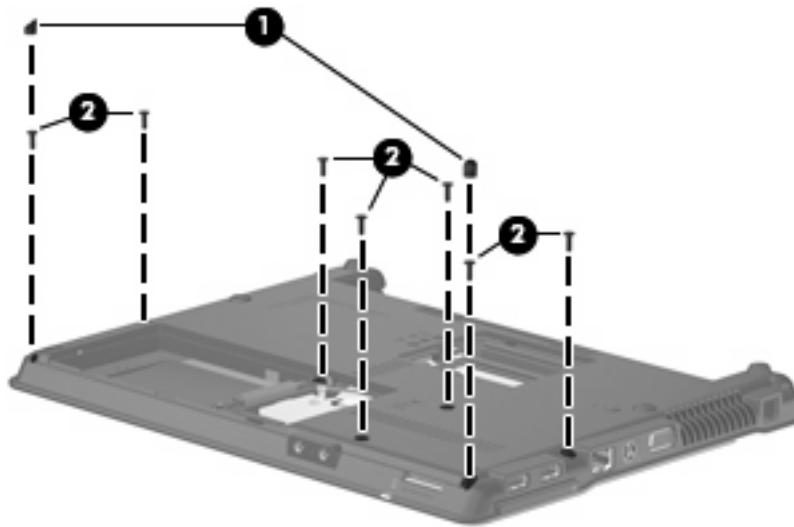
Before removing the top cover, follow these steps:

1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).
5. Remove the following components:
  - a. Hard drive (see [Hard drive on page 47](#))
  - b. Optical drive (see [Optical drive on page 55](#))
  - c. Switch cover (see [Switch cover and keyboard on page 57](#))
  - d. Keyboard (see [Switch cover and keyboard on page 57](#))
  - e. Speakers (see [Speakers on page 61](#))
  - f. Display assembly (see [Display assembly on page 62](#))

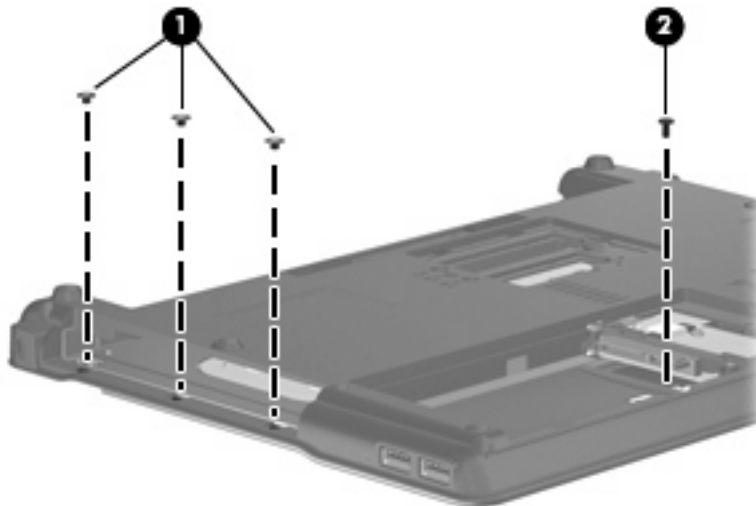
Remove the top cover:

1. Turn the computer upside down, with the front toward you.

2. Remove the two rubber screw covers **(1)** and the seven slotted Torx ST8M2.5×7.0 screws **(2)** that secure the top cover to the computer. The rubber screw covers are available in the Rubber Kit, spare part numbers 497622-001 (for use only with HP Compaq 6535s Notebook PC models) and 491654-001 (for use only with HP Compaq 6530s and 6531s Notebook PC models).

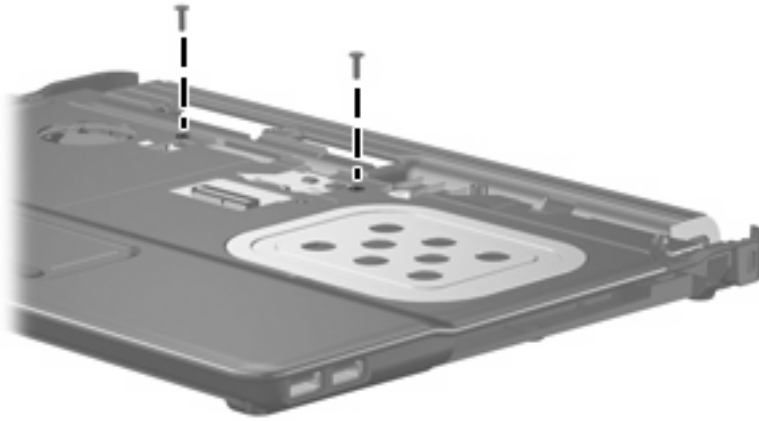


3. Remove the three Phillips PM2.0×2.0 broadhead (5-mm) screws from the optical drive bay **(1)**, and remove the Torx T8M2.5×4.0 screw from the hard drive bay **(2)**.



4. Turn the computer right-side up.

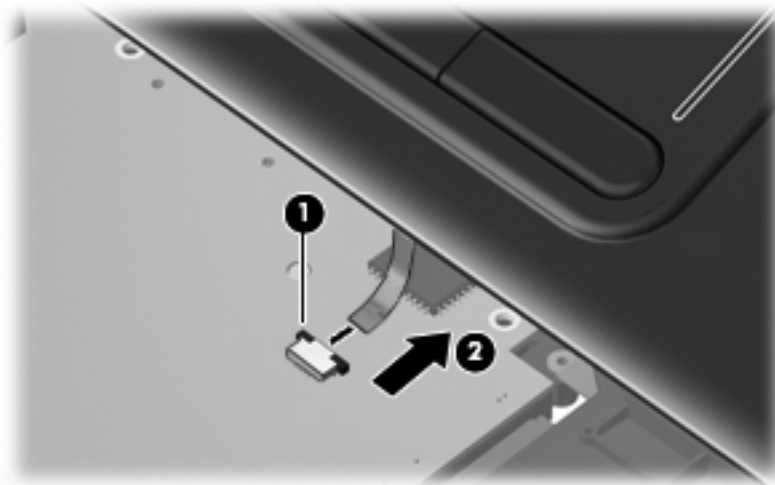
5. Remove the two slotted Torx ST8M2.5×7.0 screws from the top cover.



6. Lift the rear edge of the top cover (1) until it disengages from the base enclosure, and then tilt the top cover (2) back until the TouchPad cable is accessible.



7. Release the ZIF connector (1) to which the TouchPad cable is connected, and then disconnect the TouchPad cable from the system board (2).

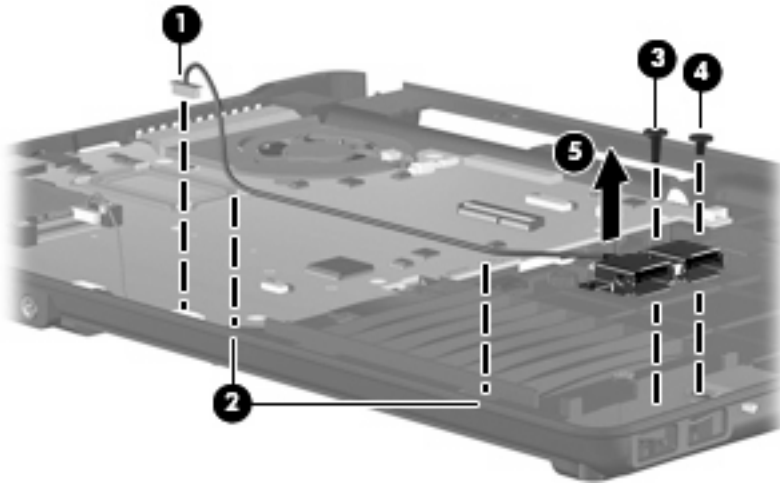


8. Remove the top cover.

Reverse this procedure to install the top cover.

## USB connector module

1. Disconnect the USB cable from the system board (1).
2. Lift up the USB connector and remove the cable from the front edge of the base enclosure (2).
3. Remove the long Phillips PM2.5×9.0 screw (3) and the short Torx T8M2.5×4.0 screw (4) from the system board.
4. Remove the USB connector module (5).



Reverse this procedure to install the USB connector module.



## Bluetooth module

Description	Spare part number
Broadcom Bluetooth module for use in all countries and regions except Japan and Asia Pacific	398393-002
Broadcom Bluetooth module for use only in Japan and Asia Pacific	450066-001

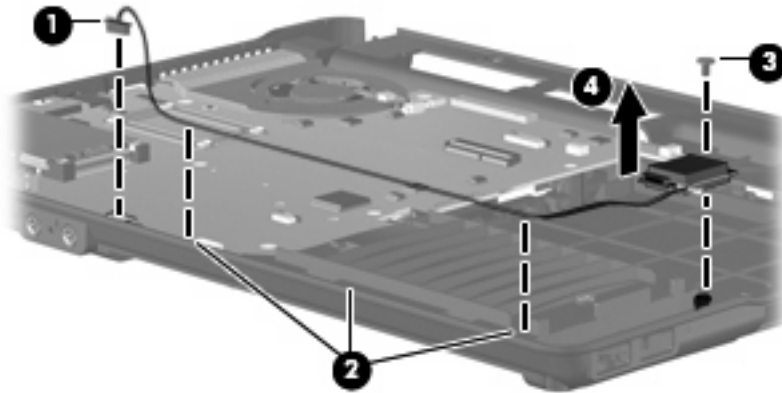
Before removing the Bluetooth module, follow these steps:

1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).
5. Remove the following components:
  - a. Hard drive (see [Hard drive on page 47](#))
  - b. Optical drive (see [Optical drive on page 55](#))
  - c. Switch cover (see [Switch cover and keyboard on page 57](#))
  - d. Keyboard (see [Switch cover and keyboard on page 57](#))
  - e. Speakers (see [Speakers on page 61](#))
  - f. Display assembly (see [Display assembly on page 62](#))
  - g. Top cover (see [Top cover on page 68](#))

Remove the Bluetooth module:


1. Disconnect the Bluetooth module cable **(1)** from the system board.
2. Remove the Bluetooth module cable **(2)** from the routing path.
3. Remove the Phillips PM2.0×4.0 screw **(3)** that secures the Bluetooth module to the base enclosure.

4. Remove the Bluetooth module (4) from the base enclosure.



Reverse this procedure to install the Bluetooth module.

## RTC battery

 **NOTE:** Removing the RTC battery and leaving it uninstalled for 5 or more minutes causes all passwords and CMOS settings to be cleared.

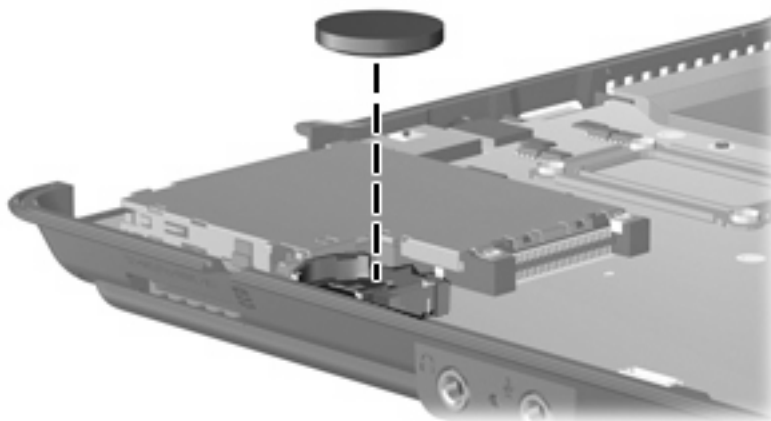
Description	Spare part number
RTC battery	449137-001

Before removing the RTC battery, follow these steps:

1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).
5. Remove the following components:
  - a. Hard drive (see [Hard drive on page 47](#))
  - b. Optical drive (see [Optical drive on page 55](#))
  - c. Keyboard (see [Switch cover and keyboard on page 57](#))
  - d. Switch cover (see [Switch cover and keyboard on page 57](#))
  - e. Speakers (see [Speakers on page 61](#))
  - f. Display assembly (see [Display assembly on page 62](#))
  - g. Top cover (see [Top cover on page 68](#))

Remove the RTC battery:

1. Turn the system board upside down, with the audio connectors toward you.
2. Remove the RTC battery from the socket on the system board.



Reverse this procedure to install the RTC battery.

## Fan

Description	Spare part number
Fan	490324-001

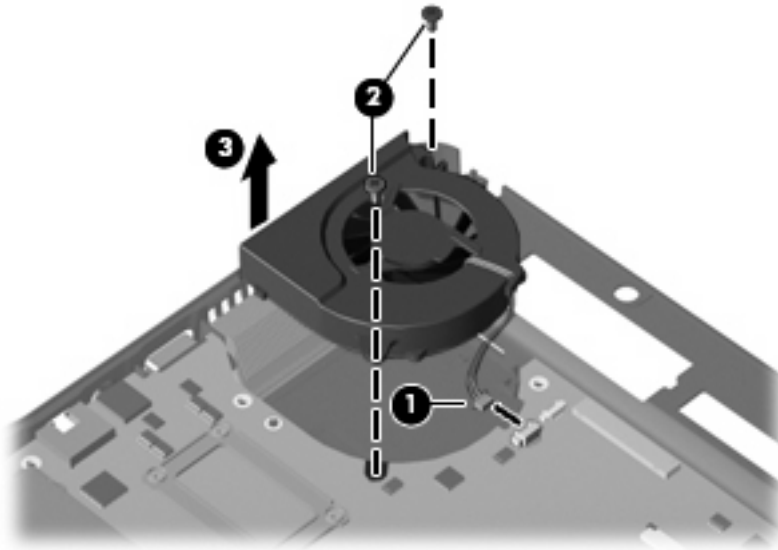
Before removing the fan, follow these steps:

1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).
5. Remove the following components:
  - a. Hard drive (see [Hard drive on page 47](#))
  - b. Optical drive (see [Optical drive on page 55](#))
  - c. Switch cover (see [Switch cover and keyboard on page 57](#))
  - d. Keyboard (see [Switch cover and keyboard on page 57](#))
  - e. Speakers (see [Speakers on page 61](#))
  - f. Display assembly (see [Display assembly on page 62](#))
  - g. Top cover (see [Top cover on page 68](#))


Remove the fan:

1. Disconnect the fan cable **(1)** from the system board.
2. Remove the two Torx T8M2.5×6.0 screws **(2)** that secure the fan to the base enclosure.

3. Lift the fan up (3) from the base enclosure.



Reverse this procedure to install the fan.

 **NOTE:** To properly ventilate the computer, allow at least a 7.6-cm (3-inch) clearance on the left side of the computer.

The computer uses an electric fan for ventilation. The fan is controlled by a temperature sensor and is designed to turn on automatically when high temperature conditions exist. These conditions are affected by high external temperatures, system power consumption, power management/battery conservation configurations, battery fast charging, and software requirements. Exhaust air is displaced through the ventilation grill located on the left side of the computer.

## System board



**NOTE:** All system board spare part kits include the ExpressCard assembly.

**NOTE:** All system board spare part kits include replacement thermal material.

Description	Spare part number
For use only with computer models equipped with AMD processors	497613-001
For use only with computer models equipped with Intel processors with UMA graphics subsystem and a GM45 system board	501354-001
For use only with computer models equipped with Intel processors with UMA graphics subsystem and a GL40 system board	491250-001
For use only with computer models equipped with Intel processors (includes 128-MB DDR2 discrete graphics system memory)	491977-001
For use only with computer models equipped with Intel processors (includes 256-MB DDR2 discrete graphics system memory)	491976-001

Before removing the system board, follow these steps:

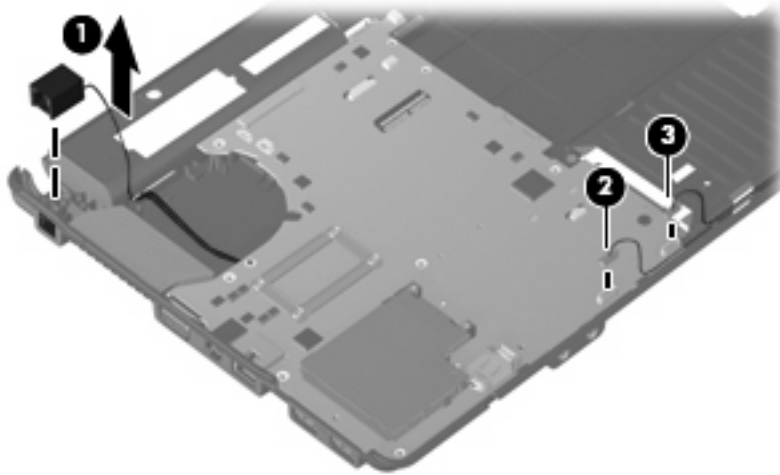
1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).
5. Remove the following components:
  - a. Hard drive (see [Hard drive on page 47](#))
  - b. Optical drive (see [Optical drive on page 55](#))
  - c. Keyboard (see [Switch cover and keyboard on page 57](#))
  - d. Switch cover (see [Switch cover and keyboard on page 57](#))
  - e. Speakers (see [Speakers on page 61](#))
  - f. Display assembly (see [Display assembly on page 62](#))
  - g. Top cover (see [Top cover on page 68](#))
  - h. USB connector module (see [USB connector module on page 72](#))
  - i. Bluetooth module (see [Bluetooth module on page 73](#))
  - j. Fan (see [Fan on page 77](#))
  - k. RTC battery (see [RTC battery on page 75](#))

When replacing the system board, be sure that the following components are removed from the defective system board and installed on the replacement system board:

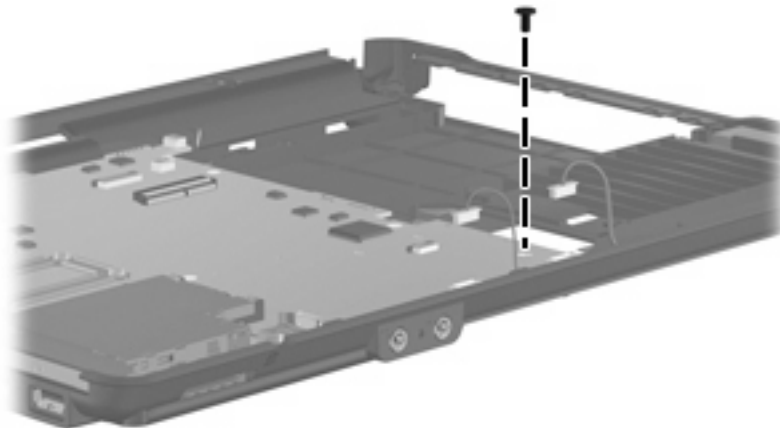
- Memory module (see [Memory module on page 53](#))
- WLAN module (see [WLAN module on page 50](#))
- Processor (see [Processor on page 88](#))

Remove the system board:

1. Remove the RJ-11 connector **(1)** from the base enclosure clip.
2. Disconnect the Bluetooth module cable **(2)** and the USB connector module cable **(3)** from the system board.



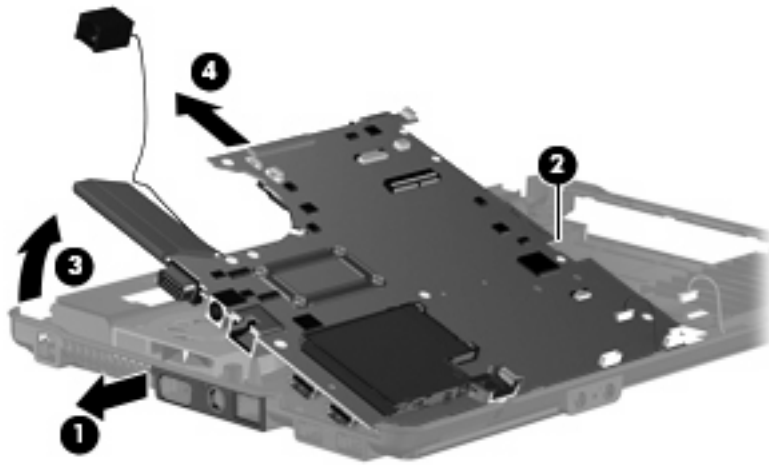
3. Remove the Torx T8M2.5×6.0 screw from the system board.



4. Flex the left side of the base enclosure until the external monitor connector **(1)** and the heat sink **(2)** are clear of the openings in the base enclosure.
5. Lift the rear edge of the system board **(3)** until it rests at an angle.



6. Remove the system board (4) from the base enclosure by sliding it back.



Reverse this procedure to install the system board.

## Modem module

Description	Spare part number
For use in all countries and regions except Australia and New Zealand	461749-001
For use only in Australia and New Zealand	461749-011

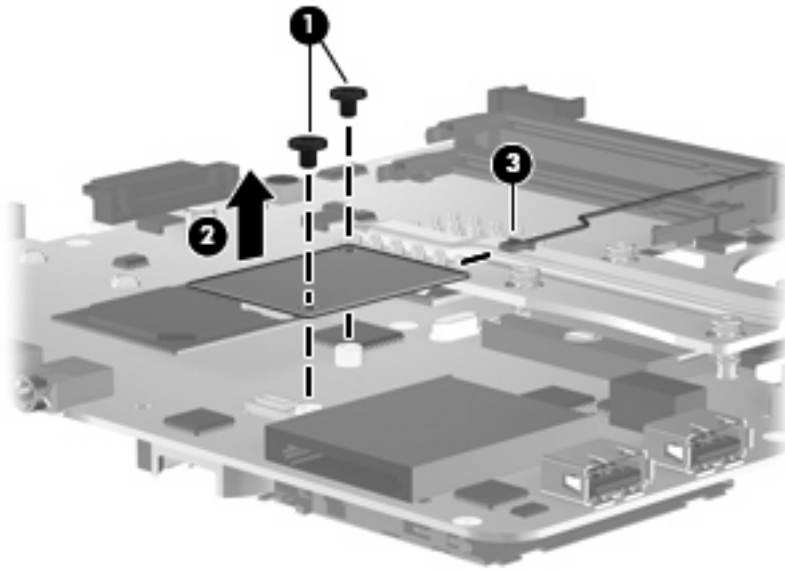
Before removing the modem module, follow these steps:

1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).
5. Remove the following components:
  - a. Hard drive (see [Hard drive on page 47](#))
  - b. Optical drive (see [Optical drive on page 55](#))
  - c. Keyboard (see [Switch cover and keyboard on page 57](#))
  - d. Switch cover (see [Switch cover and keyboard on page 57](#))
  - e. Speakers (see [Speakers on page 61](#))
  - f. Display assembly (see [Display assembly on page 62](#))
  - g. Top cover (see [Top cover on page 68](#))
  - h. System board (see [System board on page 79](#))

Remove the modem module:

1. Turn the system board upside down, with the audio connectors toward you.
2. Remove the two Phillips PM2.5×4.0 screws **(1)** that secure the modem module to the system board.
3. Lift the modem module **(2)** straight up to disconnect it from the system board.

4. Disconnect the modem module cable (3) .



5. Remove the modem module.

Reverse this procedure to install the modem module.

## Heat sink



**NOTE:** The heat sink spare part kit includes replacement thermal material.

Description	Spare part number
For use only with HP Compaq 6535s Notebook PC models	493174-001
For use only with HP Compaq 6531s Notebook PC models	491980-001
For use only with HP Compaq 6530s Notebook PC models	496679-001

Before removing the heat sink, follow these steps:

1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.
4. Remove the battery (see [Battery on page 46](#)).
5. Remove the following components:
  - a. Hard drive (see [Hard drive on page 47](#))
  - b. Optical drive (see [Optical drive on page 55](#))
  - c. Keyboard (see [Switch cover and keyboard on page 57](#))
  - d. Switch cover (see [Switch cover and keyboard on page 57](#))
  - e. Speakers (see [Speakers on page 61](#))
  - f. Display assembly (see [Display assembly on page 62](#))
  - g. Top cover (see [Top cover on page 68](#))
  - h. System board (see [System board on page 79](#))

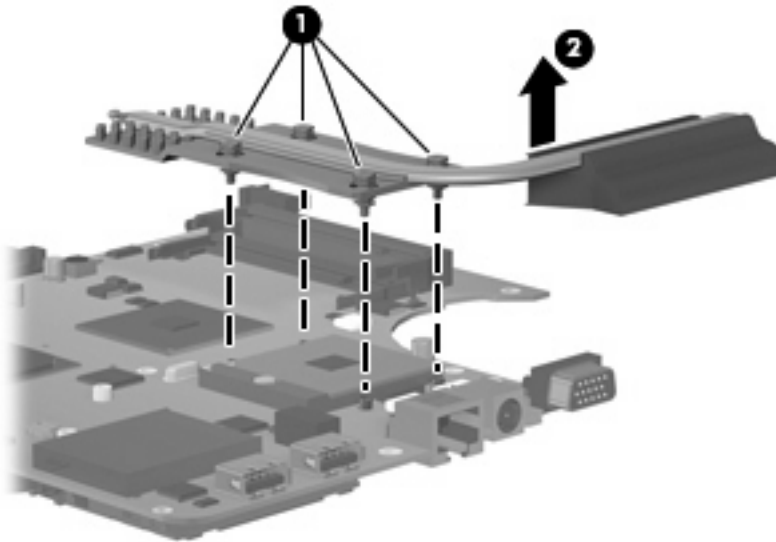
Remove the heat sink:




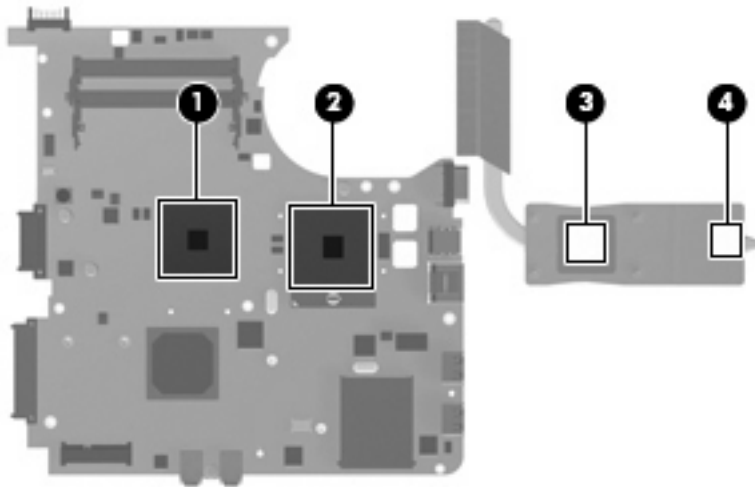
**NOTE:** Steps 1 through 3 apply only to HP Compaq 6531s Notebook PC models. See steps 4 through 6 for removing the heat sink on HP Compaq 6530s Notebook PC models. See steps 7 through 9 for removing the heat sink on HP Compaq 6535s Notebook PC models.


1. Turn the system board upside down, with the audio connectors toward you.
2. Following the 1, 2, 3, 4 sequence stamped into the heat sink, loosen the four screws **(1)** around the processor.

3. Remove the heat sink (2).



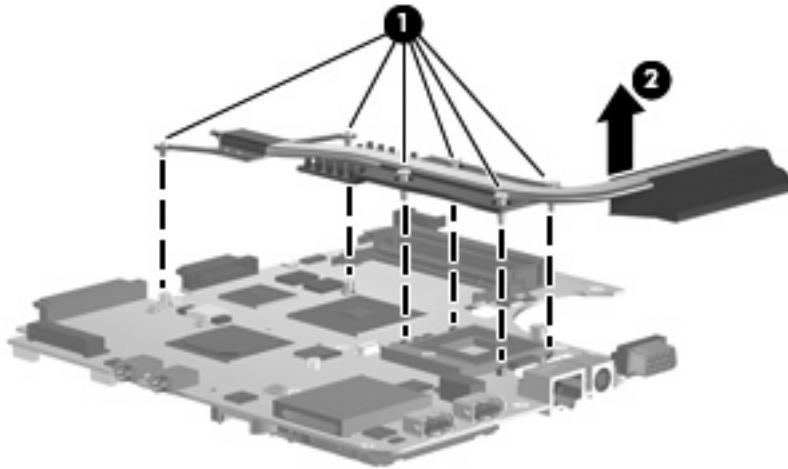
 **NOTE:** The thermal material must be thoroughly cleaned from the surfaces of the heat sink (1) and (2), and the system board components (3) and (4) each time the heat sink is removed. Replacement thermal material is included with all heat sink, system board, and processor spare part kits.




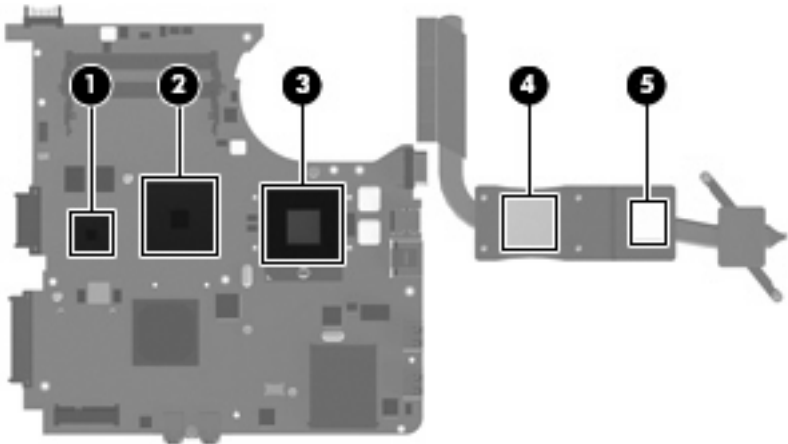
 **NOTE:** Steps 4 through 6 apply only to HP Compaq 6530s Notebook PC models. See steps 1 through 3 for removing the heat sink on HP Compaq 6531s Notebook PC models. See steps 7 through 9 for removing the heat sink on HP Compaq 6535s Notebook PC models.


4. Turn the system board upside down, with the audio connectors toward you.
5. Following the 1, 2, 3, 4 sequence stamped into the heat sink, loosen the six screws (1) around the processor.

6. Remove the heat sink (2).



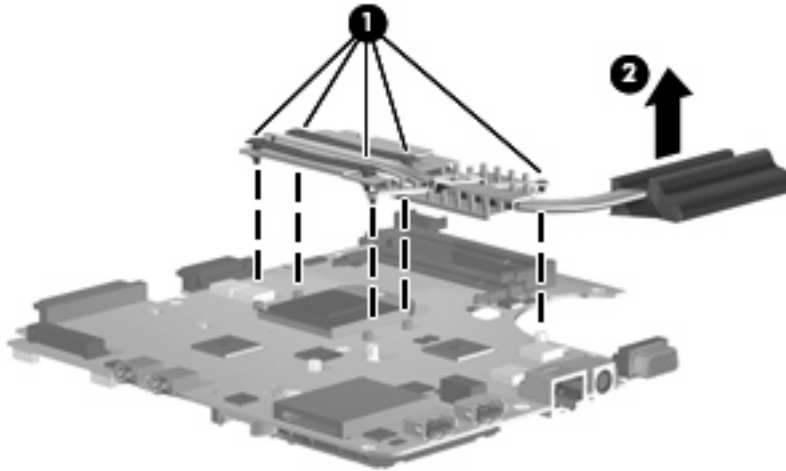
 **NOTE:** The thermal material must be thoroughly cleaned from the surfaces of the heat sink (1), (2), and (3), and the system board components (4), and (5) each time the heat sink is removed. Replacement thermal material is included with all heat sink, system board, and processor spare part kits.




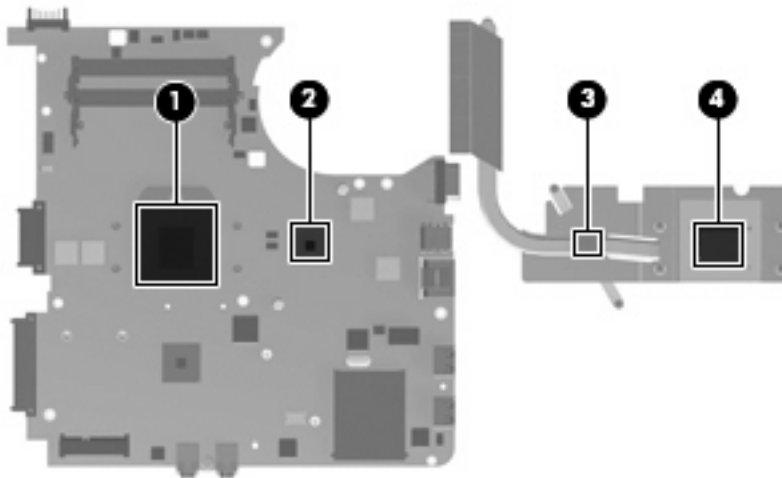
 **NOTE:** Steps 7 through 9 apply only to HP Compaq 6535s Notebook PC models

7. Turn the system board upside down, with the audio connectors toward you.
8. Following the 1, 2, 3, 4 sequence stamped into the heat sink, loosen the five screws (1) around the processor.

9. Remove the heat sink (2).



 **NOTE:** The thermal material must be thoroughly cleaned from the surfaces of the heat sink (1) and (2), and the system board components (3) and (4) each time the heat sink is removed. Replacement thermal material is included with all heat sink, system board, and processor spare part kits.



Reverse this procedure to install the heat sink.

## Processor



**NOTE:** All processor spare part kits include replacement thermal material.

Description	Spare part number
<b>AMD processors</b> for use only with HP Compaq 6535s computer models	
Turion Ultra ZM-86 2.40-GHz processor	493150-001
Turion Ultra ZM-84 2.30-GHz processor	506283-001
Turion Ultra ZM-82 2.20-GHz processor	493149-001
Turion Ultra ZM-80 2.10-GHz processor	493148-001
Turion RM-72 2.1GHz (35W 1-MB L2 cache)	506282-001
Turion RM-70 2.00-GHz processor	493147-001
Athlon QL-60 1.90-GHz processor	493146-001
Athlon QL-62 2.0-GHz processor	506281-001
Sempron SI-40 2.00-GHz processor	493145-001
<b>Intel Core2 Duo processors</b> for use only with HP Compaq 6530s and 6531s computer models	
T5670 1.80-GHz processor (2-MB L2 cache, 800-MHz FSB) (not available for Japan)	507511-001
T5870 2.0-GHz processor (2-MB L2 cache, 800-MHz FSB) (not available for Japan)	507512-001
P7370 2.0-GHz processor (3.0-MB L2 cache, 1066-MHz FSB)	506455-001
P8400 2.26-GHz processor (3-MB L2 cache, 1066-MHz FSB)	491659-001
P8600 2.4-GHz processor (3-MB L2 cache, 1066-MHz FSB)	491660-001
T9400 2.53-GHz processor (6-MB L2 cache, 1066-MHz FSB)	491661-001
<b>Intel Celeron M Processors</b> for use only with HP Compaq 6530s and 6531s computer models	
Cel-575 2.0-GHz processor (1-MB, 667-MHz FSB)	506443-001
Cel-585 2.16-GHz processor (1-MB, 667-MHz FSB)	506444-001
<b>Intel Celeron Dual-Core processors</b> for use only with HP Compaq 6530s and 6531s computer models	
T1600 1.66-GHz processor (1-MB, 667-MHz FSB)	506453-001
T1700 1.83-GHz processor (1-MB, 667-MHz FSB)	506454-001


Before removing the processor, follow these steps:

1. Shut down the computer. If you are unsure whether the computer is off or in Hibernation, turn the computer on, and then shut it down through the operating system.
2. Disconnect all external devices connected to the computer.
3. Disconnect the power from the computer by first unplugging the power cord from the AC outlet and then unplugging the AC adapter from the computer.




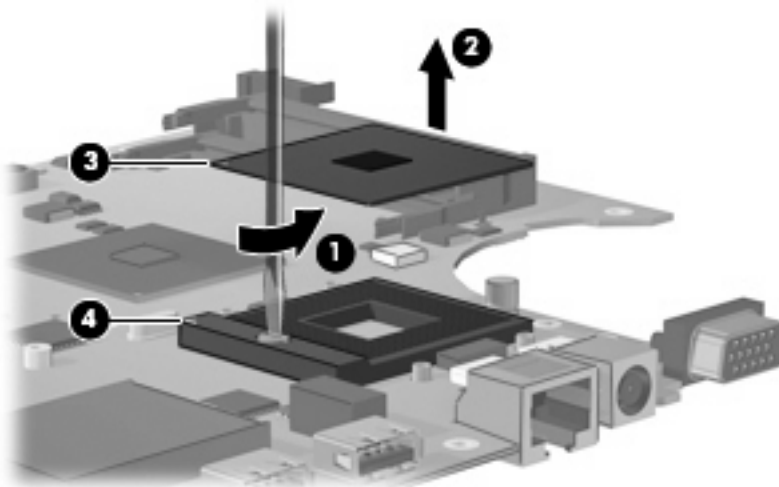
4. Remove the battery (see [Battery on page 46](#)).
5. Remove the following components:
  - a. Hard drive (see [Hard drive on page 47](#))
  - b. Optical drive (see [Optical drive on page 55](#))
  - c. Keyboard (see [Switch cover and keyboard on page 57](#))
  - d. Switch cover (see [Switch cover and keyboard on page 57](#))
  - e. Speakers (see [Speakers on page 61](#))
  - f. Display assembly (see [Display assembly on page 62](#))
  - g. Top cover (see [Top cover on page 68](#))
  - h. System board (see [System board on page 79](#))


Remove the processor:

 **NOTE:** Steps 1 through 3 apply only to HP Compaq 6530s and 6531s models. See steps 4 and 5 for instructions on removing the processor on HP Compaq 6535s models.

1. Turn the system board upside down, with the USB connectors toward you.
2. Use a flat-bladed screwdriver to turn the processor locking screw **(1)** one-half turn counterclockwise until you hear a click.
3. Lift the processor **(2)** straight up and remove it.


 **NOTE:** When you install the processor, the gold triangle **(3)** on the processor must be aligned with the triangle **(4)** embossed on the processor socket.

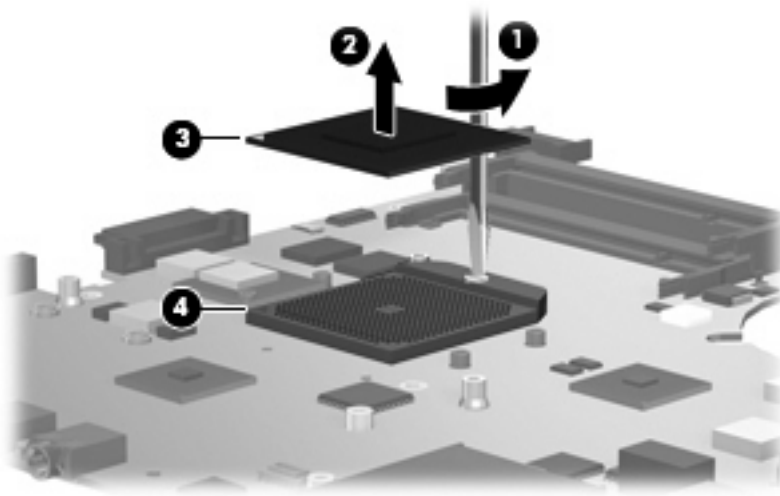


 **NOTE:** Steps 4 and 5 apply only to HP Compaq 6535s models. See steps 1 through 3 for instructions on removing the processor on HP Compaq 6530s and 6531s models.

4. Use a flat-bladed screwdriver to turn the processor locking screw **(1)** one-half turn counterclockwise until you hear a click.

5. Lift the processor (2) straight up and remove it.

 **NOTE:** When you install the processor, the gold triangle (3) on the processor must be aligned with the triangle (4) embossed on the processor socket.



Reverse this procedure to install the processor.

---

## 5 Computer Setup

### Starting Computer Setup

Computer Setup is a preinstalled, ROM-based utility that can be used even when the operating system is not working or will not load.



**NOTE:** Some of the Computer Setup menu items listed in this guide may not be supported by your computer.

**NOTE:** An external keyboard or mouse connected to a USB port can be used with Computer Setup only if USB legacy support is enabled.

To start Computer Setup, follow these steps:

1. Turn on or restart the computer, and then press **esc** while the “Press the ESC key for Startup Menu” message is displayed at the bottom of the screen.
2. Press **f10** to enter BIOS Setup.

# Using Computer Setup

## Navigating and selecting in Computer Setup

The information and settings in Computer Setup are accessed from the File, Security, Diagnostics, and System Configuration menus.

To navigate and select in Computer Setup, follow these steps:

1. Turn on or restart the computer, and then press **esc** while the “Press the ESC key for Startup Menu” message is displayed at the bottom of the screen.
  - To select a menu or a menu item, use the keyboard arrow keys and then press **enter**, or use a pointing device to click the item.
  - To scroll up and down, click the up arrow or the down arrow in the upper-right corner of the screen.
  - To close open dialog boxes and return to the main Computer Setup screen, press **esc**, and then follow the on-screen instructions.



**NOTE:** You can use either a pointing device (TouchPad, pointing stick, or USB mouse) or the keyboard to navigate and make selections in Computer Setup.

2. Press **f10** to enter BIOS Setup.
3. Select the **File**, **Security**, **Diagnostics**, or **System Configuration** menu.

To exit Computer Setup menus, choose one of the following methods:

- To exit Computer Setup menus without saving your changes, click the **Exit** icon in the lower-left corner of the screen, and then follow the on-screen instructions.  
– or –  
Use the arrow keys to select **File > Ignore changes and exit**, and then press **enter**.  
– or –
- To save your changes and exit Computer Setup menus, click the **Save** icon in the lower-left corner of the screen, and then follow the on-screen instructions.

– or –

Use the arrow keys to select **File > Save changes and exit**, and then press **enter**.

Your changes go into effect when the computer restarts.

## Restoring factory settings in Computer Setup



**NOTE:** Restoring defaults will not change the hard drive mode.

To return all settings in Computer Setup to the values that were set at the factory, follow these steps:

1. Turn on or restart the computer, and then press **esc** while the “Press the ESC key for Startup Menu” message is displayed at the bottom of the screen.
2. Press **f10** to enter BIOS Setup.

3. Use a pointing device or the arrow keys to select **File > Restore defaults**.
4. Follow the on-screen instructions.
5. To save your changes and exit, click the **Save** icon in the lower-left corner of the screen, and then follow the on-screen instructions.

– or –

Use the arrow keys to select **File > Save changes and exit**, and then press [enter](#).

Your changes go into effect when the computer restarts.



---

**NOTE:** Your password settings and security settings are not changed when you restore the factory settings.

---

# Computer Setup menus

The menu tables in this section provide an overview of Computer Setup options.



**NOTE:** Some of the Computer Setup menu items listed in this chapter may not be supported by your computer.

## File menu

Select	To do this
System Information	<ul style="list-style-type: none"><li>• View identification information for the computer and the batteries in the system.</li><li>• View specification information for the processor, cache and memory size, system ROM, video revision, and keyboard controller version.</li></ul>
Set System Date and Time	Set or change the date and time on the computer.
Restore defaults	Replace the configuration settings in Computer Setup with the original factory settings. (Hard drive mode, password settings, and security settings are not changed when you restore the factory settings.)
Ignore changes and exit	Cancel any changes entered during the current session. Then exit and restart the computer.
Save changes and exit	Save any changes entered during the current session. Then exit and restart the computer. Your changes go into effect when the computer restarts.

## Security menu



**NOTE:** Some of the menu items listed in this section may not be supported by your computer.

Select	To do this
User Management (requires an administrator password)	<ul style="list-style-type: none"> <li>Create a new BIOS user account.</li> <li>View a list of ProtectTools users.</li> </ul>
Password Policy (requires an administrator password)	Revise password policy criteria.
Allow HP SpareKey Enrollment	Enable/disable permission to enroll or reset HP SpareKey.
HP SpareKey Enrollment	Enroll or reset HP SpareKey, which is a set of security questions and answers used if you forget your password.
HP SpareKey	Enable/disable HP SpareKey (enabled by default).
Fingerprint Reset on Reboot (If Present)	Enable/disable the fingerprint reader (select models only; disabled by default).
Change Password	Enter, change, or delete a BIOS administrator password.
DriveLock Passwords	<ul style="list-style-type: none"> <li>Enable/disable DriveLock on any computer hard drive (enabled by default).</li> <li>Change a DriveLock user password or master password.</li> </ul> <p><b>NOTE:</b> DriveLock settings are accessible only when you enter Computer Setup by turning on (not restarting) the computer.</p>
Automatic DriveLock	Enable/disable Automatic DriveLock support.
TPM Embedded Security (requires an administrator password)	<ul style="list-style-type: none"> <li>Change TPM (Trusted Platform Module) Embedded Security device state at restart. The following options are available: <ul style="list-style-type: none"> <li>Do Nothing (enabled by default)</li> <li>Available and Disabled</li> <li>Available and Enabled</li> <li>Factory Defaults</li> </ul> </li> <li>Reset Authentication Credential.</li> <li>Enable/disable support for the following: <ul style="list-style-type: none"> <li>Power-on authentication support (enabled by default)</li> <li>Operating system TPM management (enabled by default)</li> <li>Reset of TPM from operating system (disabled by default)</li> </ul> </li> </ul>
Disk Sanitizer	<p>Run Disk Sanitizer to destroy all existing data on the primary hard drive or the drive in the upgrade bay.</p> <p><b>CAUTION:</b> If you run Disk Sanitizer, the data on the selected drive is destroyed permanently.</p>

Select	To do this
System IDs	Enter a user-defined computer asset tracking number and ownership tag.
Setup BIOS Administrator Password	Set up a BIOS administrator password.
Always Prompt for HP SpareKey Enrollment	Enable/disable a prompt for HP SpareKey enrollment.

## Diagnostics menu

Select	To do this
System Diagnostics menu	<ul style="list-style-type: none"> <li>• F1 System Information—Displays the following information: <ul style="list-style-type: none"> <li>◦ Identification information for the computer and the batteries in the system.</li> <li>◦ Specification information for the processor, cache and memory size, system ROM, video revision, and keyboard controller version.</li> </ul> </li> <li>• F2 Start-up Test—Verifies the system components needed for starting the computer.</li> <li>• F3 Run-In Test—Runs a comprehensive check on system memory.</li> <li>• F4 Hard Disk Test—Runs a comprehensive self-test on any hard drive in the system.</li> </ul>



## System Configuration menu



**NOTE:** Some of the listed System Configuration options may not be supported by your computer.

Select	To do this
Language	Change the Computer Setup language.
Boot Options	<ul style="list-style-type: none"> <li>• Set a Startup Menu delay (in seconds).</li> <li>• Enable/disable Custom Logo (disabled by default).</li> <li>• Enable/disable Display Diagnostic URL (enabled by default).</li> <li>• Enable/disable CD-ROM boot (enabled by default).</li> <li>• Enable/disable SD Card boot (enabled by default).</li> <li>• Enable/disable floppy boot (enabled by default).</li> <li>• Enable/disable PXE Internal NIC boot (enabled by default).</li> <li>• Set the Express Boot Popup delay in seconds.</li> <li>• Set the boot order.</li> </ul>
Device Configurations	<ul style="list-style-type: none"> <li>• Enable/disable USB legacy support (enabled by default). When enabled, USB legacy support allows the following: <ul style="list-style-type: none"> <li>◦ Use of a USB keyboard in Computer Setup even when a Windows operating system is not running.</li> <li>◦ Startup from bootable USB devices, including a hard drive, diskette drive, or optical drive connected by a USB port to the computer.</li> </ul> </li> <li>• Select a parallel port mode: ECP (Enhanced Capabilities Port), standard, bidirectional, or EPP (Enhanced Parallel Port).</li> <li>• Enable/disable fan always on while connected to an AC outlet (enabled by default).</li> <li>• Enable/disable LAN Power Save (select models only). When enabled, saves power by turning off the LAN when not in use (enabled by default).</li> <li>• Enable/disable Data Execution Prevention. When enabled, the processor can disable some virus code execution, which helps to improve computer security.</li> <li>• SATA (Serial Advanced Technology Attachment) device mode. The following options are available: <ul style="list-style-type: none"> <li>◦ AHCI (Advanced Host Controller Interface)</li> <li>◦ IDE (Integrated Drive Electronics)</li> <li>◦ RAID (select models only)</li> </ul> </li> </ul> <p><b>NOTE:</b> Availability of the options above varies by computer model.</p>

Select	To do this
	<ul style="list-style-type: none"> <li>• Enable/disable secondary battery fast charge (enabled by default).</li> <li>• Enable/disable HP QuickLook 2 (enabled by default).</li> <li>• Enable/disable Virtualization Technology (select models only; disabled by default).</li> <li>• Enable/disable TXT (Intel Trusted Execution Technology) (select models only; disabled by default).</li> <li>• Enable/disable Dual-Core CPU (select models only; enabled by default).</li> <li>• Enable/Disable Unified Extensible Firmware Interface (UEFI) mode (disabled by default).</li> </ul>
Built-In Device Options	<ul style="list-style-type: none"> <li>• Enable/disable the wireless button state (enabled by default).</li> <li>• Enable/disable embedded WWAN device radio (select models only; enabled by default).</li> <li>• Enable/disable embedded Bluetooth device radio (enabled by default).</li> <li>• Enable/disable the Network Interface Controller (LAN) (enabled by default).</li> <li>• Set the wake on LAN state. Options include the following: <ul style="list-style-type: none"> <li>◦ Disabled</li> <li>◦ Boot to Network (set by default)</li> <li>◦ Follow Boot Order</li> </ul> </li> <li>• Enable/disable the fingerprint device (enabled by default).</li> <li>• Enable/disable a modem device (enabled by default).</li> <li>• Enable/disable the embedded WLAN device (enabled by default).</li> <li>• Enable/disable LAN/WLAN switching (disabled by default).</li> <li>• Enable the ambient light sensor (enabled by default).</li> <li>• Enable/disable the Notebook Multibay device (enabled by default).</li> <li>• Enable/disable the integrated camera (select models only; enabled by default).</li> </ul>
Port Options (all are enabled by default)	<p><b>NOTE:</b> All port options are enabled by default.</p> <ul style="list-style-type: none"> <li>• Enable/disable the Smart Card slot.</li> <li>• Enable/disable the ExpressCard slot.</li> <li>• Enable/disable the serial port.</li> </ul>

Select	To do this
	<ul style="list-style-type: none"> <li>• Enable/disable the parallel port.</li> <li>• Enable/disable the flash media reader.</li> <li>• Enable/disable the USB port.</li> </ul> <p><b>CAUTION:</b> Disabling the USB port also disables MultiBay devices and ExpressCard devices on the advanced port replicator.</p> <ul style="list-style-type: none"> <li>• Enable/disable the 1394 port.</li> </ul>
AMT Options (all are disabled by default)	<p><b>NOTE:</b> All AMT options are disabled by default.</p> <ul style="list-style-type: none"> <li>• Enable/disable Firmware Verbosity.</li> <li>• Enable/disable AMT Setup Prompt (CTRL-P).</li> <li>• Enable/disable USB Key Provisioning Support.</li> <li>• Enable/disable Unconfigure AMT on Next Boot.</li> <li>• Enable/disable Terminal Emulation Mode</li> <li>• Enable/disable Firmware Progress Event Support.</li> <li>• Enable/disable Include TYPE-131 in SMBIOS.</li> </ul>
Set Security Level	Change, view, or hide security levels for all BIOS menu items.
Restore Security Defaults	Restore the default security settings.

## 6 Specifications

### Computer specifications

	Metric	U.S.
Dimensions		
Depth	24.64 cm	9.70 in
Width	33.80 cm	13.33 in
Height (front to rear)	3.07 to 3.43 cm	1.21 to 1.35 in
Weight (equipped with optical drive, hard drive, and battery)	2.27 kg	5.00 lbs
Input power		
Operating voltage	18.5 V dc @ 4.74 A – 90 W	
Operating current	4.74 A	
Temperature		
Operating (not writing to optical disc)	0°C to 35°C	32°F to 95°F
Operating (writing to optical disc)	5°C to 35°C	41°F to 95°F
Nonoperating	-20°C to 60°C	-4°F to 140°F
Relative humidity		
Operating	10% to 90%	
Nonoperating	5% to 95%	
Maximum altitude (unpressurized)		
Operating (14.7 to 10.1 psia)	-15 m to 3,048 m	-50 ft to 10,000 ft
Nonoperating (14.7 to 4.4 psia)	-15 m to 12,192 m	-50 ft to 40,000 ft
Shock		
Operating	125 g, 2 ms, half-sine	
Nonoperating	200 g, 2 ms, half-sine	
Random vibration		
Operating	0.75 g zero-to-peak, 10 Hz to 500 Hz, 0.25 oct/min sweep rate	

	Metric	U.S.
Nonoperating	1.50 g zero-to-peak, 10 Hz to 500 Hz, 0.5 oct/min sweep rate	
<b>NOTE:</b> Applicable product safety standards specify thermal limits for plastic surfaces. The computer operates well within this range of temperatures.		

## 14.1-inch, WXGA display specifications

	Metric	U.S.
Dimensions		
Height	27.94 cm	11.0 in
Width	20.83 cm	8.2 in
Diagonal	35.56 cm	14.1 in
Number of colors	Up to 16.8 million	
Contrast ratio	250:1 (typical)	
Brightness	180 nits (typical)	
Pixel resolution		
Pitch	0.279 × 0.279 mm	
Format	1280 × 800	
Configuration	RGB vertical stripe	
Backlight	Edge lit	
Character display	80 × 25	
Total power consumption	4.0 W	
Viewing angle	+/-40 horizontal, +20/-40° vertical (typical)	

## Hard drive specifications

	320-GB*	250-GB*	160-GB*	120-GB*
Dimensions				
Height	9.5 mm	9.5 mm	9.5 mm	9.5 mm
Width	70 mm	70 mm	70 mm	70 mm
Weight	101 g	101 g	101 g	101 g
Interface type	SATA	SATA	SATA	SATA
Transfer rate	100 MB/sec	100 MB/sec	100 MB/sec	100 MB/sec
Security	ATA security	ATA security	ATA security	ATA security
Seek times (typical read, including setting)				
Single track	3 ms	3 ms	3 ms	3 ms
Average	13 ms	13 ms	13 ms	13 ms
Maximum	24 ms	24 ms	24 ms	24 ms
Logical blocks	625,122,560	488,376,120	312,560,640	234,420,480
Disc rotational speed	5400 rpm	5400 rpm	5400 rpm	5400 rpm
Operating temperature	5°C to 55°C (41°F to 131°F)			
*1 GB = 1 billion bytes when referring to hard drive storage capacity. Actual accessible capacity is less. Actual drive specifications may differ slightly.				
NOTE: Certain restrictions and exclusions apply. Contact technical support for details.				

## DVD±RW and CD-RW Combo Drive, Double-Layer specifications

Applicable disc	Read:	Write:
	CD-DA, CD+(E)G, CD-MIDI, CD-TEXT, CD-ROM, CD-ROM XA, MIXED MODE CD, CD-I, CD-I Bridge (Photo-CD, Video CD), Multisession CD (Photo-CD, CD-EXTRA, Portfolio, CD-R, CD-RW), CD-R, CD-RW, DVD-ROM (DVD-5, DVD-9, DVD-10, DVD-18), DVD-R, DVD-RW, DVD+R, DVD+RW, DVD-RAM	CD-R and CD-RW DVD+R, DVD+RW, DVD-R, DVD-RW, DVD-RAM
Access time	CD	DVD
Random	< 175 ms	< 230 ms
Cache buffer	2 MB	
Data transfer rate		
24X CD-ROM	3,600 KB/sec	
8X DVD-ROM	10,800 KB/sec	
24X CD-R	3,600 KB/sec	
16X CD-RW	2,400 KB/sec	
8X DVD+R	10,800 KB/sec	
4X DVD+RW	5,400 KB/sec	
8X DVD-R	10,800 KB/sec	
4X DVD-RW	5,400 KB/sec	
2.4X DVD+R(9)	2,700 KB/sec	
5X DVD-RAM	6,750 KB/sec	
Transfer mode	Multiword DMA Mode	

## DVD/CD-RW Combo Drive specifications

<b>Applicable disc</b>	<b>Read:</b> CD-DA, CD+(E)G, CD-MIDI, CD-TEXT, CD-ROM, CD-ROM XA, MIXED MODE CD, CD-I, CD-I Bridge (Photo-CD, Video CD), Multisession CD (Photo-CD, CD-EXTRA, Portfolio, CD-R, CD-RW), CD-R, CD-RW, DVD-ROM (DVD-5, DVD-9, DVD-10, DVD-18), DVD-R, DVD-RW, DVD+R, DVD+RW, DVD-RAM	<b>Write:</b> CD-R and CD-RW
<b>Access time</b>	<b>CD</b>	<b>DVD</b>
Random	< 110 ms	< 130 ms
<b>Cache buffer</b>	2 MB	
<b>Data transfer rate</b>		
24X CD-ROM	3,600 KB/sec	
8X DVD	3,600 KB/sec	
24X CD-R	3,600 KB/sec	
24X CD-RW	3,600 KB/sec	
<b>Transfer mode</b>	Multiword DMA mode 2	



## DVD-ROM Drive

<b>Applicable disc</b>	DVD-ROM (DVD-5, DVD-9, DVD-10, DVD-18, CD-ROM (Mode 1 and 2), CD Digital Audio, CD-XA ready (Mode 2, Form 1 and Form 2), CD-I (Mode 2, Form 1 and Form 2), CD-R, CD-RW, Photo CD (single and multisession), CD-Bridge	
<b>Access time</b>	<b>CD</b>	<b>DVD</b>
Random	< 100 ms	< 125 ms
<b>Cache buffer</b>	512 KB	
<b>Data transfer rate</b>		
CD-R (24X)	3600 KB/s (150 KB/s at 1X CD rate)	
CD-RW (10X)	1500 KB/s (150 KB/s at 1X CD rate)	
CD-ROM (24X)	3600 KB/s (150 KB/s at 1X CD rate)	
DVD (8X)	10,800 KB/s (1,352 KB/s at 1X DVD rate)	
Multiword DMA mode 2	16.6 MB/s	

## System DMA specifications

Hardware DMA	System function
DMA0	Not applicable
DMA1*	Not applicable
DMA2*	Not applicable
DMA3	Not applicable
DMA4	Direct memory access controller
DMA5*	Available for ExpressCard
DMA6	Not assigned
DMA7	Not assigned
*ExpressCard controller can use DMA 1, 2, or 5.	

## System interrupt specifications

Hardware IRQ	System function
IRQ0	System timer
IRQ1	Standard 101-/102-Key or Microsoft Natural Keyboard
IRQ2	Cascaded
IRQ3	Intel 82801DB/DBM USB2 Enhanced Host Controller—24CD
IRQ4	COM1
IRQ5*	Conexant AC—Link Audio Intel 82801DB/DBM SMBus Controller—24C3 Data Fax Modem with SmartCP
IRQ6	Diskette drive
IRQ7*	Parallel port
IRQ8	System CMOS/real-time clock
IRQ9*	Microsoft ACPI-compliant system
IRQ10*	Intel USB UHCI controller—24C2 Intel 82852/82855 GM/GME Graphic Controller Realtek RTL8139 Family PCI Fast Ethernet Controller
IRQ11	Intel USB EHCI controller—24CD Intel USB UHCI controller—24C4 Intel USB UHCI controller—24C7 Intel Pro/Wireless 2200BG TI OHCI 1394 host controller TI PCI1410 CardBus controller
IRQ12	Synaptics PS/2 TouchPad
IRQ13	Numeric data processor
IRQ14	Primary IDE channel
IRQ15	Secondary IDE channel
*Default configuration; audio possible configurations are IRQ5, IRQ7, IRQ9, IRQ10, or none.	
<b>NOTE:</b> ExpressCards may assert IRQ3, IRQ4, IRQ5, IRQ7, IRQ9, IRQ10, IRQ11, or IRQ15. Either the infrared or the serial port may assert IRQ3 or IRQ4.	

## System I/O address specifications

I/O address (hex)	System function (shipping configuration)
000 - 00F	DMA controller no. 1
010 - 01F	Unused
020 - 021	Interrupt controller no. 1
022 - 024	Opti chipset configuration registers
025 - 03F	Unused
02E - 02F	87334 "Super I/O" configuration for CPU
040 - 05F	Counter/timer registers
044 - 05F	Unused
060	Keyboard controller
061	Port B
062 - 063	Unused
064	Keyboard controller
065 - 06F	Unused
070 - 071	NMI enable/RTC
072 - 07F	Unused
080 - 08F	DMA page registers
090 - 091	Unused
092	Port A
093 - 09F	Unused
0A0 - 0A1	Interrupt controller no. 2
I/O Address (hex)	System Function (shipping configuration)
0A2 - 0BF	Unused
0C0 - 0DF	DMA controller no. 2
0E0 - 0EF	Unused
0F0 - 0F1	Coprocessor busy clear/reset
0F2 - 0FF	Unused
100 - 16F	Unused
170 - 177	Secondary fixed disk controller
178 - 1EF	Unused
1F0 - 1F7	Primary fixed disk controller
1F8 - 200	Unused
201	JoyStick (decoded in ESS1688)
202 - 21F	Unused

I/O address (hex)	System function (shipping configuration)
220 - 22F	Entertainment audio
230 - 26D	Unused
26E - 26	Unused
278 - 27F	Unused
280 - 2AB	Unused
2A0 - 2A7	Unused
2A8 - 2E7	Unused
2E8 - 2EF	Reserved serial port
2F0 - 2F7	Unused
2F8 - 2FF	Infrared port
300 - 31F	Unused
320 - 36F	Unused
370 - 377	Secondary diskette drive controller
378 - 37F	Parallel port (LPT1/default)
380 - 387	Unused
388 - 38B	FM synthesizer—OPL3
38C - 3AF	Unused
3B0 - 3BB	VGA
3BC - 3BF	Reserved (parallel port/no EPP support)
3C0 - 3DF	VGA
3E0 - 3E1	ExpressCard controller in CPU
3E2 - 3E3	Unused
3E8 - 3EF	Internal modem
3F0 - 3F7	"A" diskette controller
3F8 - 3FF	Serial port (COM1/default)
CF8 - CFB	PCI configuration index register (PCIDIVO-1)
CFC - CFF	PCI configuration data register (PCIDIVO-1)

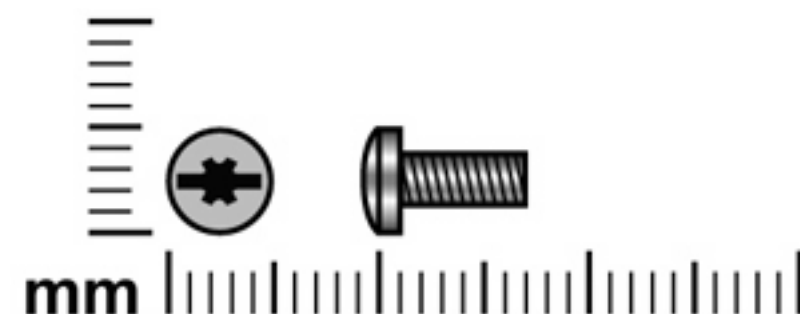
## System memory map specifications

Size	Memory address	System function
640 KB	00000000-0009FFFF	Base memory
128 KB	000A0000-000BFFFF	Video memory
48 KB	000C0000-000CBFFF	Video BIOS
160 KB	000C8000-000E7FFF	Unused
64 KB	000E8000-000FFFFFF	System BIOS
15 MB	00100000-00FFFFFF	Extended memory
58 MB	04800000-07FFFFFF	Super extended memory
58 MB	04800000-07FFFFFF	Unused
2 MB	08000000-08FFFFFF	Video memory (direct access)
4 GB	08200000-FFFFFF	Unused
64 KB	FFFF0000-FFFFFFFF	System BIOS

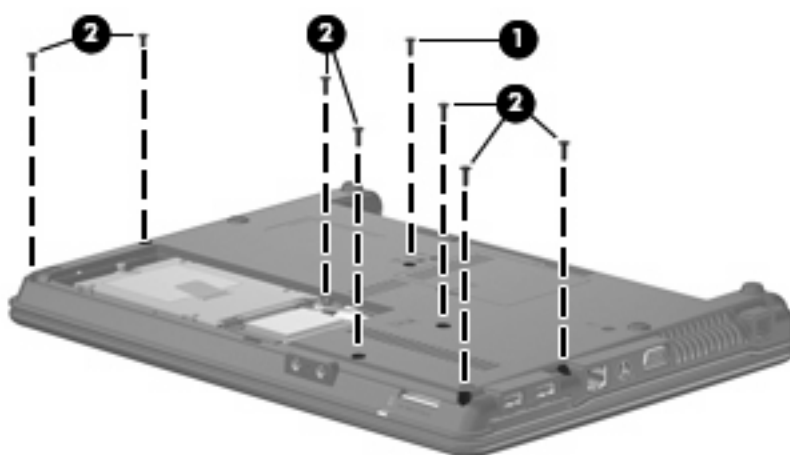
## 7 Screw listing

This chapter provides specification and reference information for the screws and screw locks used in the computer. All screws listed in this section are available in the Screw Kit, spare part numbers 493176-001 (for use only with HP Compaq 6535s Notebook PC models) and 491655-001 (for use only with HP Compaq 6530s and 6531s Notebook PC models).

### Slotted Torx ST8M2.5×7.0 screw

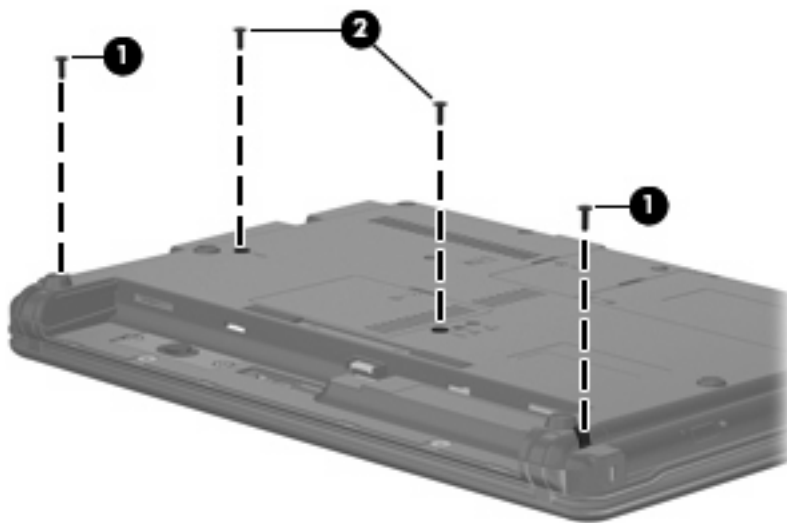


Color	Quantity	Length	Thread	Head diameter
Black	18	7.0 mm	2.5 mm	5.0 mm



#### Where used:

- (1) One screw that secures the optical drive to the computer
- (2) Seven screws that secure the top cover to the computer

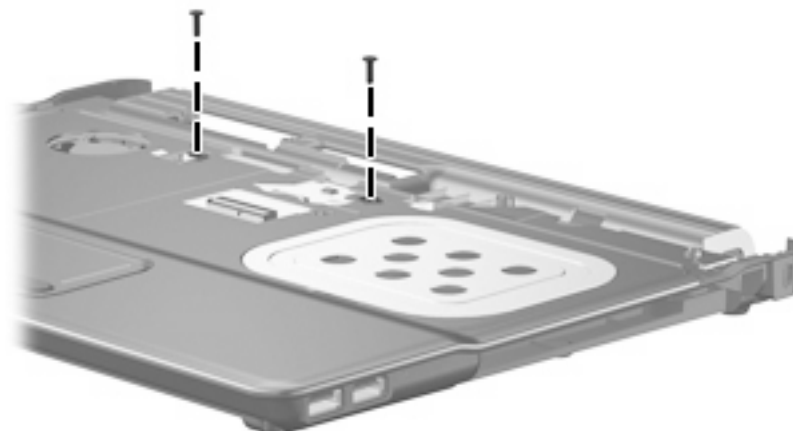


**Where used:**

- (1) Two screws that secure the switch cover to the computer
- (2) Two screws that secure the keyboard to the computer



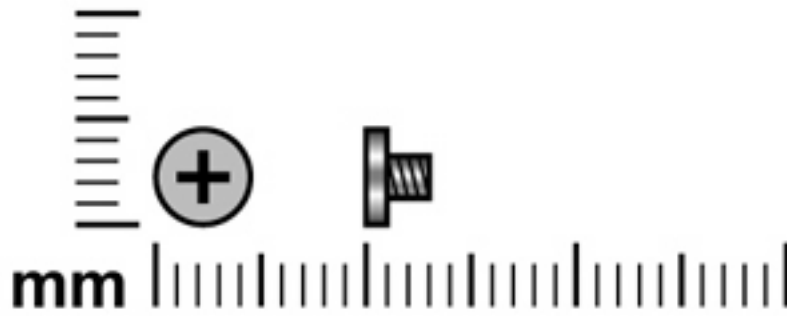
**Where used:** 4 screws that secure the display assembly to the computer





**Where used:** 2 screws that secure the top cover to the base enclosure

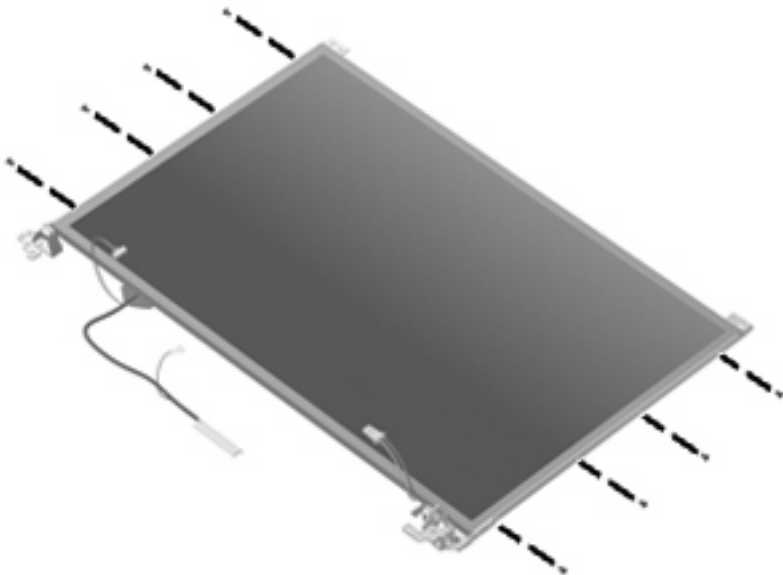
## Phillips PM2.0x3.0 screw



Color	Quantity	Length	Thread	Head diameter
Silver	10	3.0 mm	2.0 mm	5.0 mm

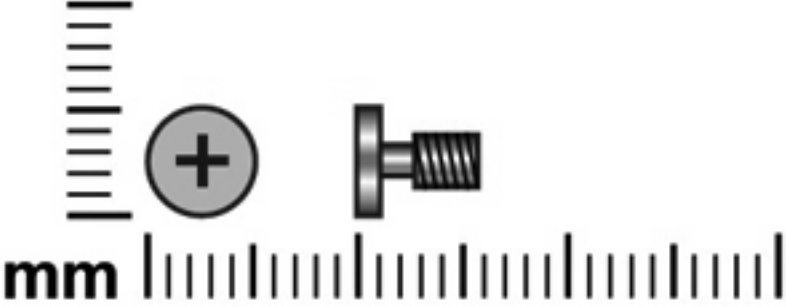


**Where used:** 2 screws that secure the optical drive bracket to the optical drive

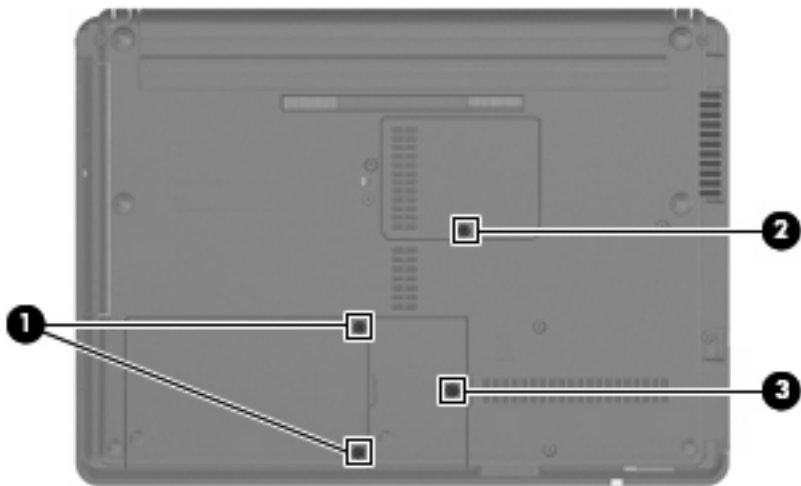


**Where used:** 8 screws that secure the display hinges to the display assembly

# Phillips PM2.5×6.0 captive screw



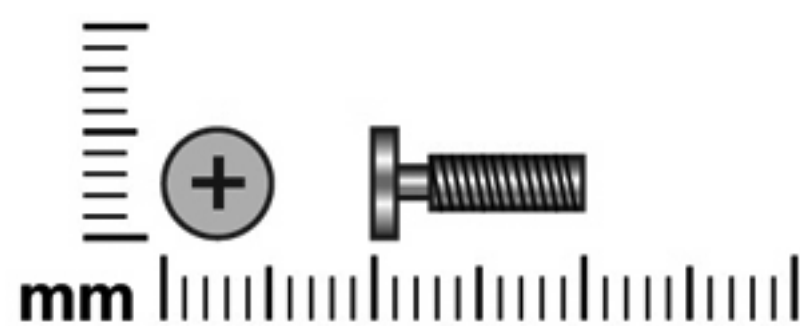
Color	Quantity	Length	Thread	Head diameter
Black	4	6.0 mm	2.5 mm	5.0 mm



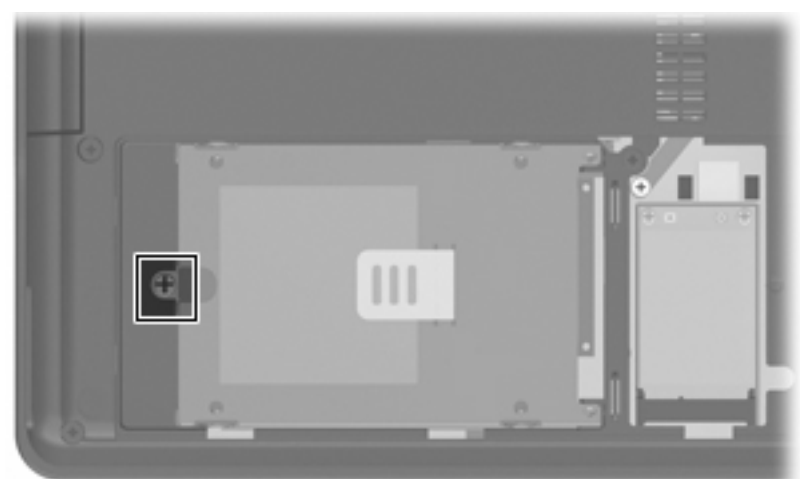
**Where used:**

- (1) Two captive screws that secure the hard drive bay cover to the computer (screws are secured by C-clips)
- (2) One captive screw that secures the WLAN module compartment cover to the computer (screw is secured by a C-clip)
- (3) One captive screw that secures the memory module compartment cover to the computer (screw is secured by a C-clip)

# Phillips PM2.5×10.0 captive screw

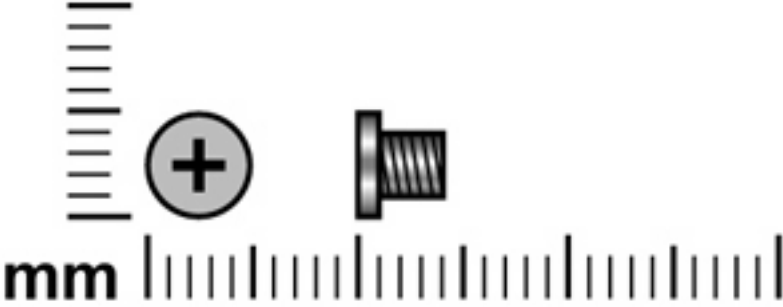


Color	Quantity	Length	Thread	Head diameter
Black	1	10.0 mm	2.5 mm	5.0 mm

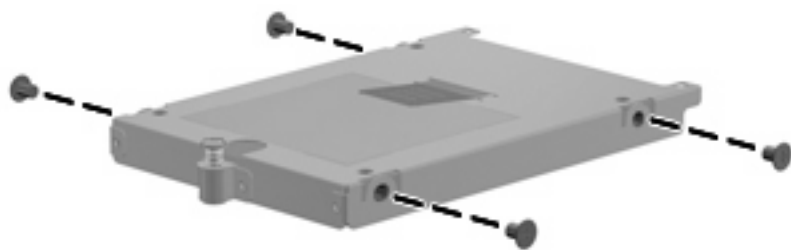


**Where used:** One captive screw that secures the hard drive to the computer (screw is secured to the hard drive bracket)

# Phillips PM3.0×4.0 screw

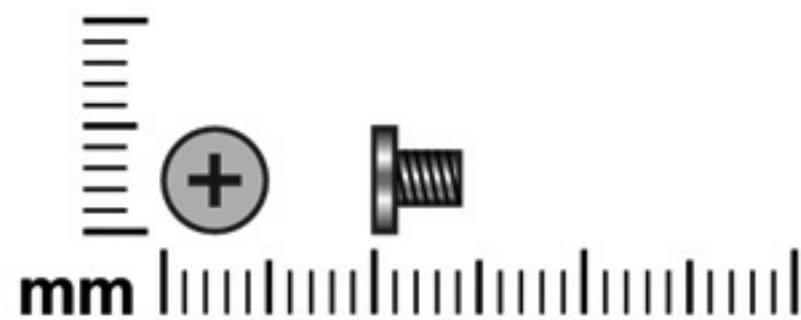


Color	Quantity	Length	Thread	Head diameter
Silver	4	4.0 mm	3.0 mm	5.0 mm

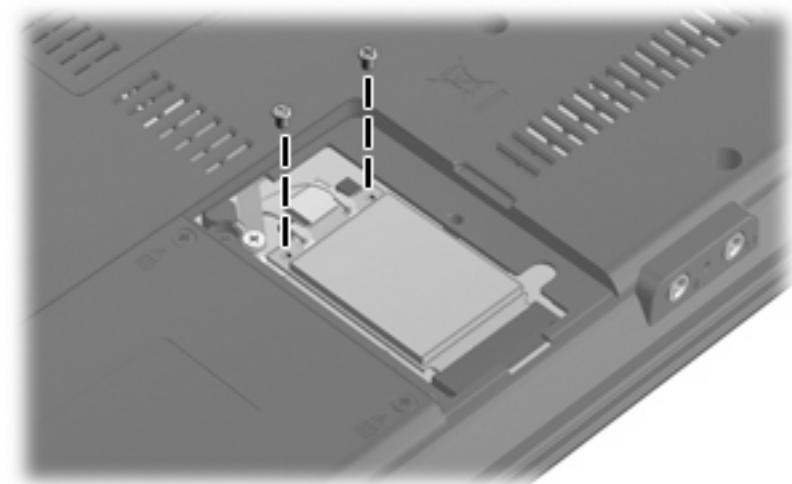


**Where used:** 4 screws that secure the hard drive bracket to the hard drive

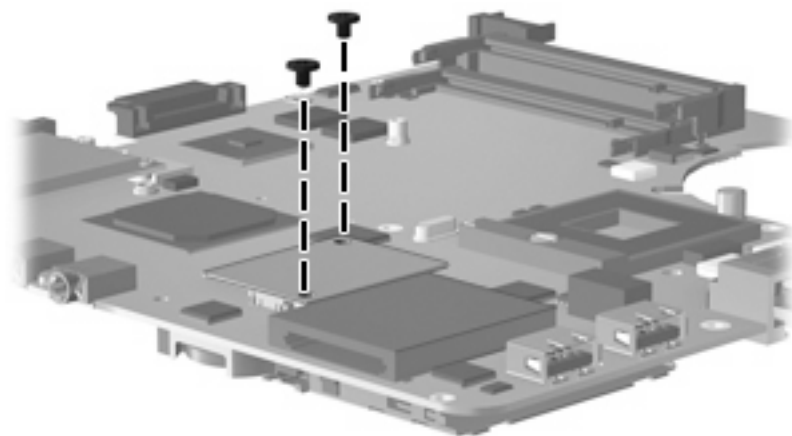
# Phillips PM2.5×4.0 screw



Color	Quantity	Length	Thread	Head diameter
Silver or Black	4	4.0 mm	2.5 mm	5.0 mm

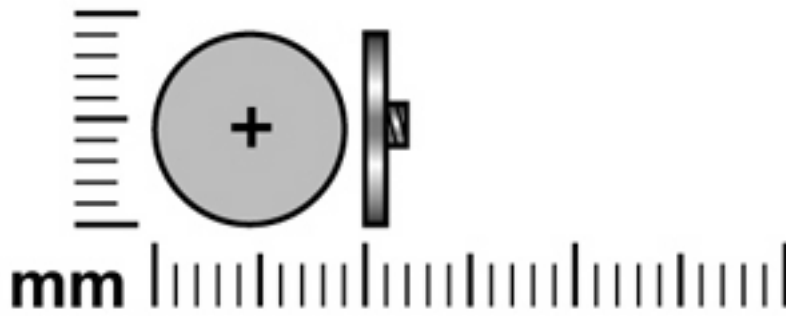


**Where used:** 2 screws that secure the WLAN module to the system board

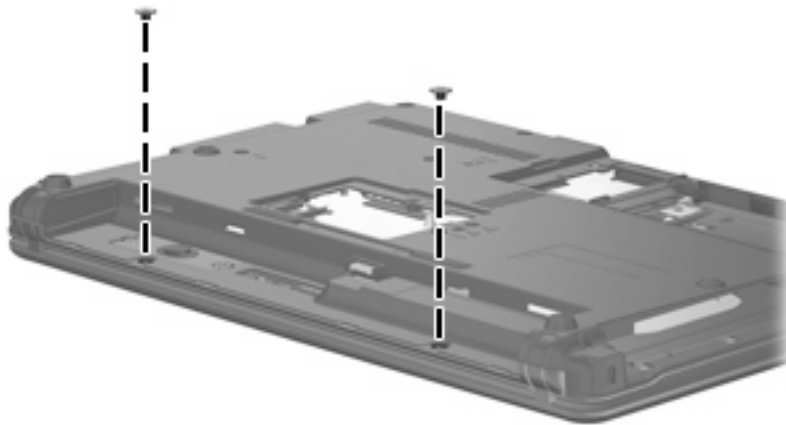


**Where used:** 2 screws that secure the modem module to the system board

## Torx T8M2.0×2.0 broadhead screw (9-mm)

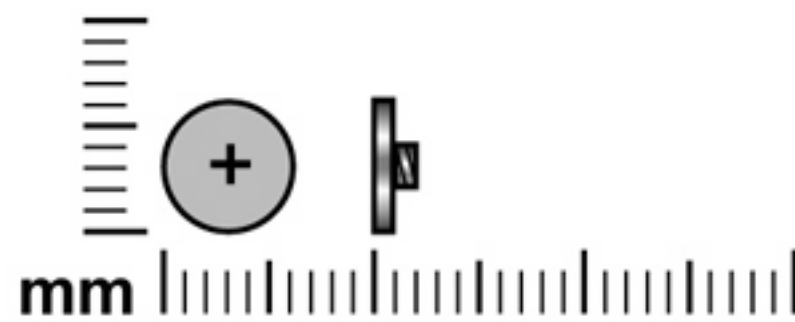


Color	Quantity	Length	Thread	Head diameter
Black	2	2.0 mm	2.0 mm	9.0 mm



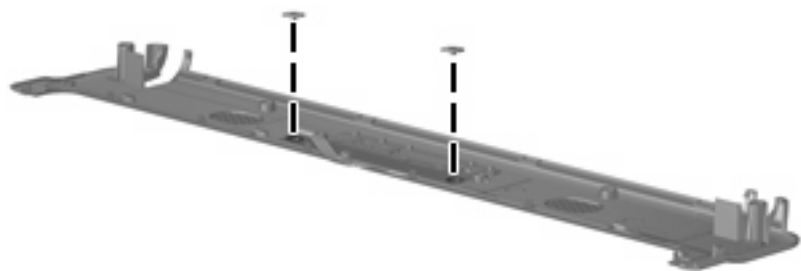
**Where used:** 2 screws that secure the switch cover to the computer

Phillips PM2.0×2.0 broadhead screw (6-mm)



Technical drawing of a Phillips PM2.0×2.0 broadhead screw (6-mm). The drawing includes a top view showing the Phillips cross symbol, a side view showing the thread, and a millimeter scale. The scale is marked in millimeters (mm).

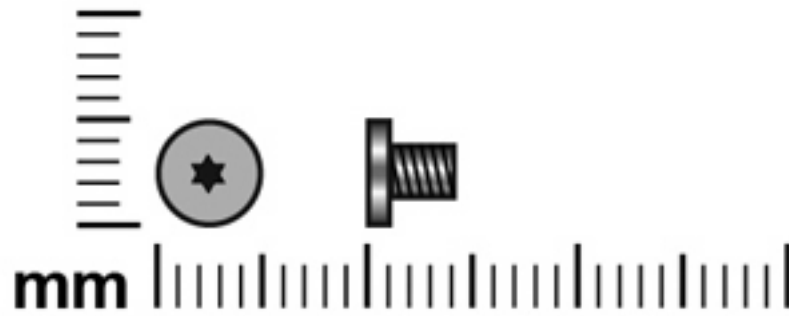
Color	Quantity	Length	Thread	Head diameter
Black	2	2.0 mm	2.0 mm	6.0 mm



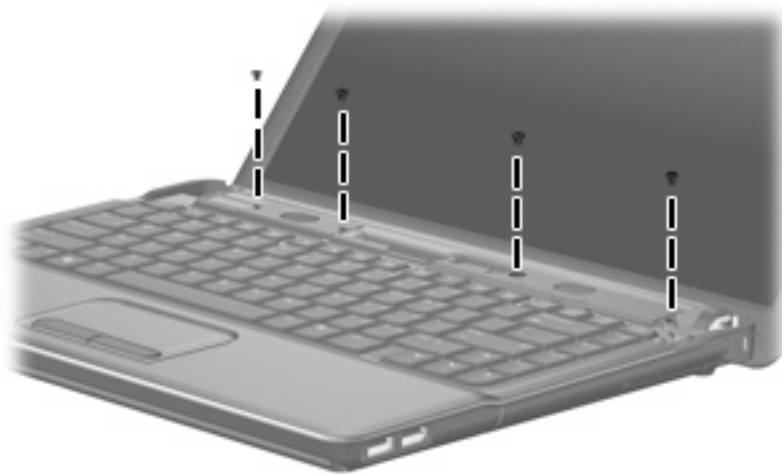
**Where used:** 2 screws that secure the button board to the switch cover



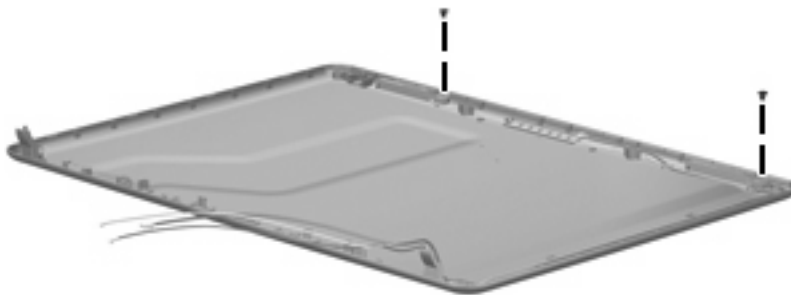
## Torx T8M2.5×4.0 screw



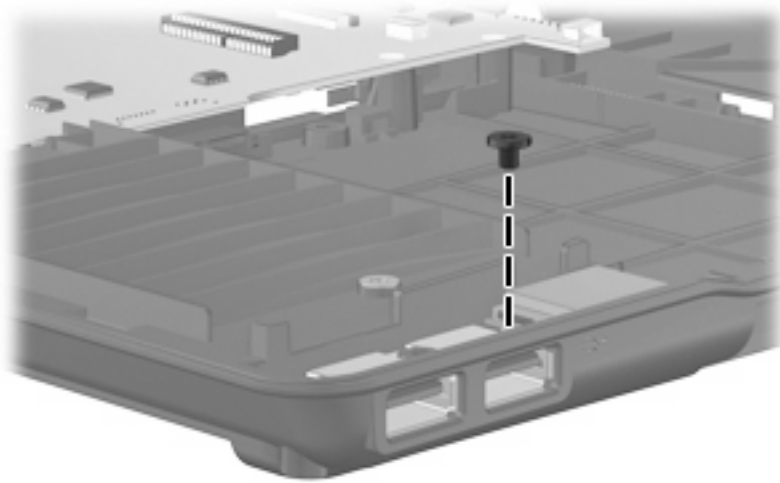
Color	Quantity	Length	Thread	Head diameter
Black	8	4.0 mm	2.5 mm	5.0 mm



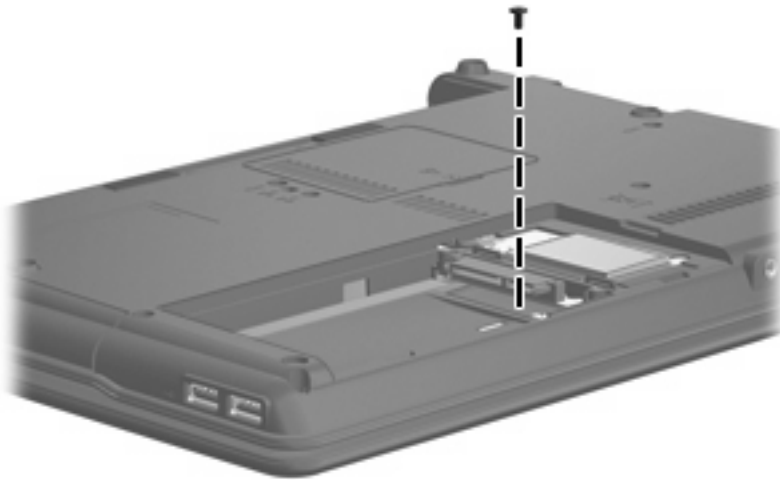
**Where used:** 4 screws that secure the speakers to the computer



**Where used:** 2 screws that secure the wireless antenna transceiver to the display enclosure

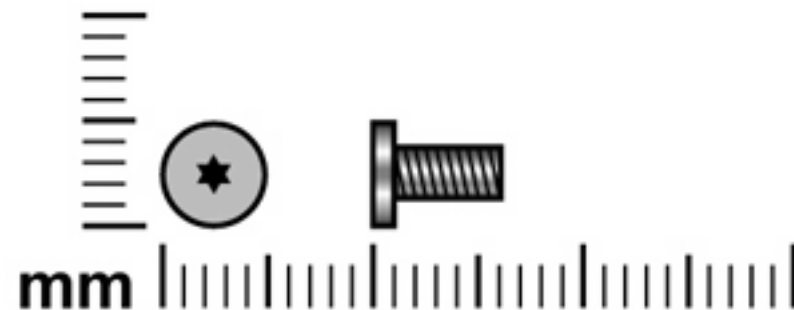


**Where used:** One screw that secures the USB board to the system board



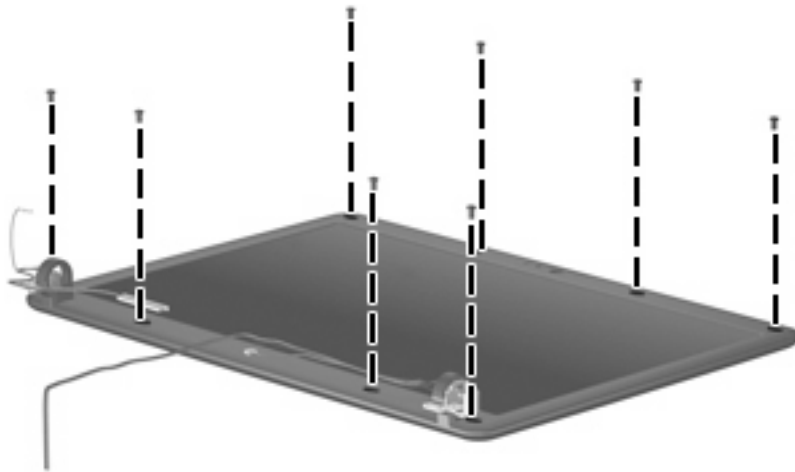
**Where used:** One screw that secures the top cover to the base enclosure

### Torx T8M2.5×6.0 screw

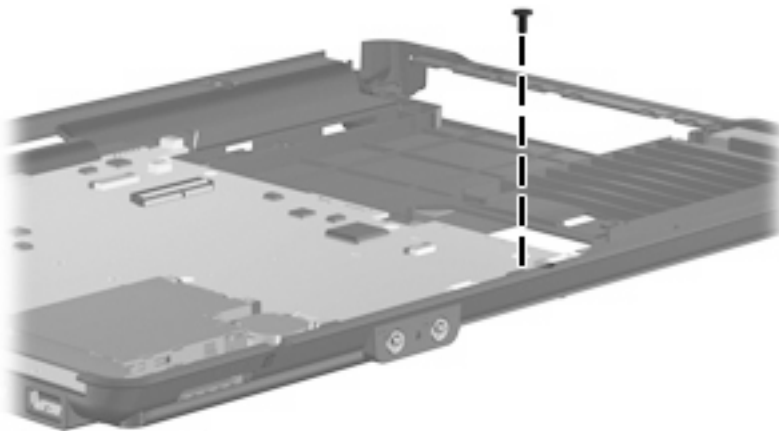


The diagram shows a Torx T8M2.5x6.0 screw. To the left of the screw head is a vertical millimeter scale from 0 to 10 mm. Below the screw head and shank is a horizontal millimeter scale from 0 to 6 mm. The screw head has a Torx star pattern. The shank has a threaded section.

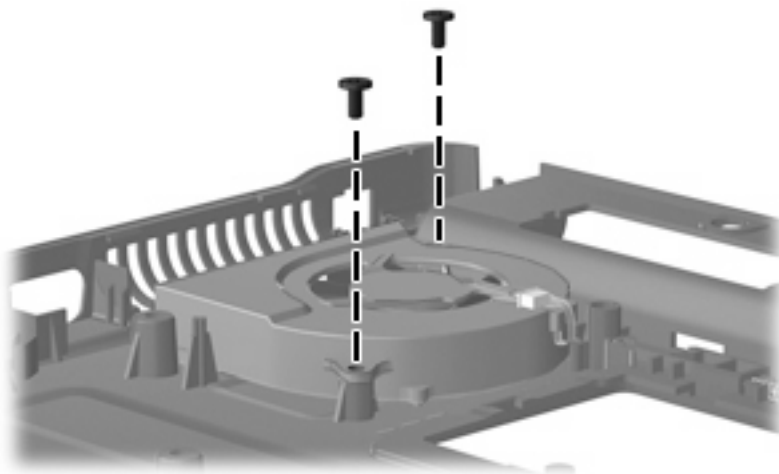
Color	Quantity	Length	Thread	Heat width
Black	11	6.0 mm	2.5 mm	5.0 mm



**Where used:** 8 screws that secure the display bezel to the display assembly

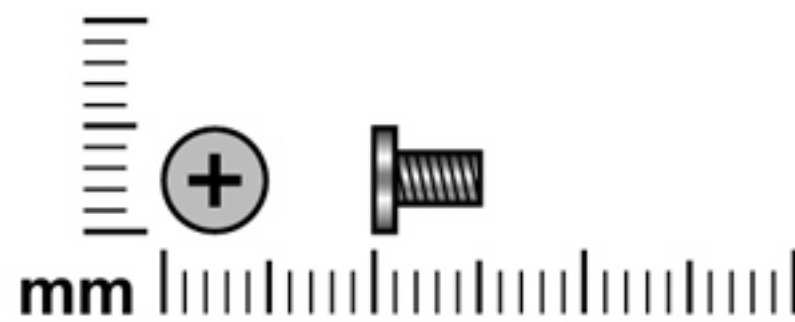


**Where used:** One screw that secures the system board to the base enclosure



**Where used:** 2 screws that secure the fan to the base enclosure

## Phillips PM2.5×5.0 screw



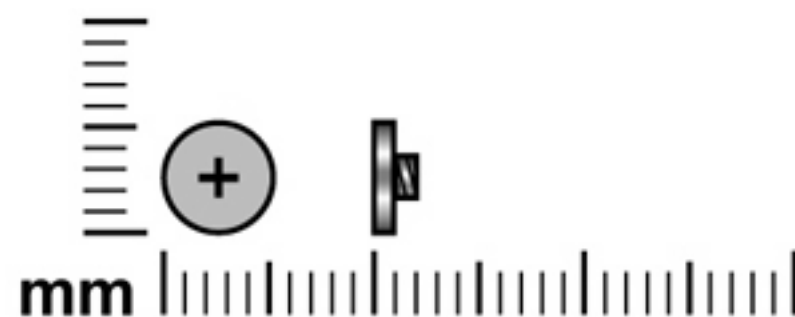
The diagram shows a Phillips PM2.5×5.0 screw. Above the screw is a circular icon with a plus sign inside. To the left of the screw is a vertical scale bar with 10 markings. Below the screw is a horizontal scale bar with 20 markings, labeled 'mm'.

Color	Quantity	Length	Thread	Head diameter
Black	2	5.0 mm	2.5 mm	5.0 mm



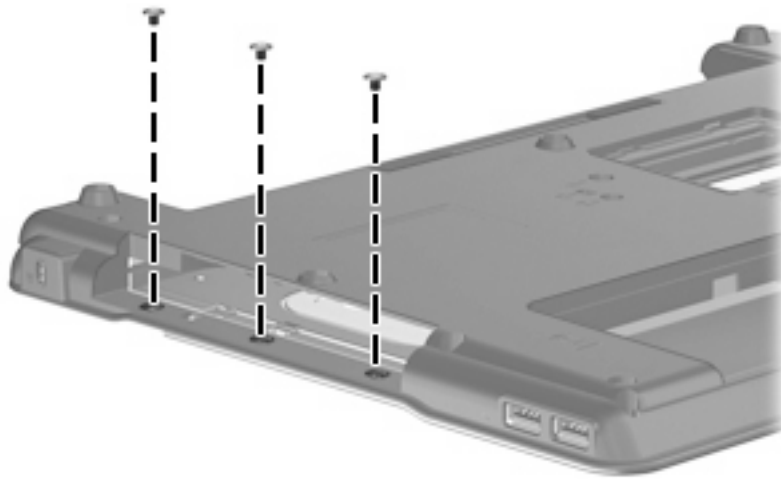
**Where used:** 2 screws that secure the display panel to the display assembly

## Phillips PM2.0×2.0 broadhead screw (5-mm)



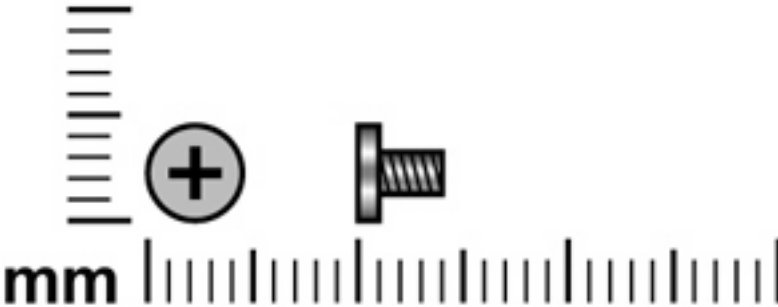
The diagram shows a Phillips PM2.0×2.0 broadhead screw. Above the screw is a circular icon with a plus sign inside. To the left of the screw is a vertical scale bar with 10 markings. Below the screw is a horizontal scale bar with 20 markings, labeled 'mm'.

Color	Quantity	Length	Thread	Head diameter
Black	3	2.0 mm	2.0 mm	5.0 mm



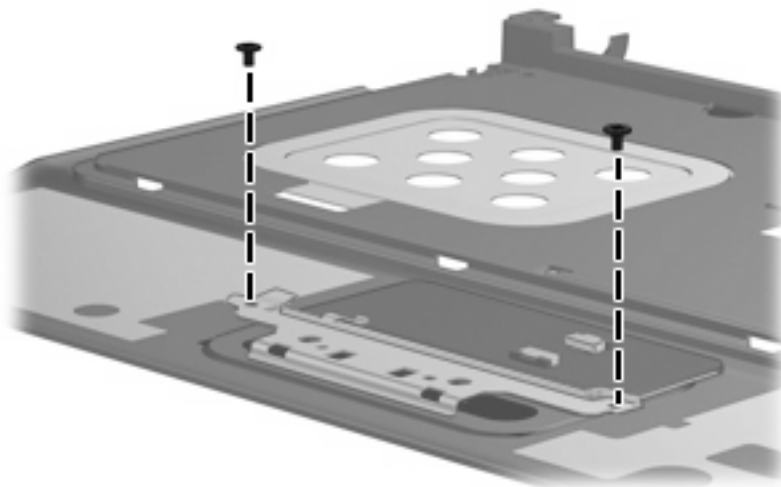
**Where used:** 3 screws that secure the top cover to the display enclosure

### Phillips PM2.0×4.0 screw

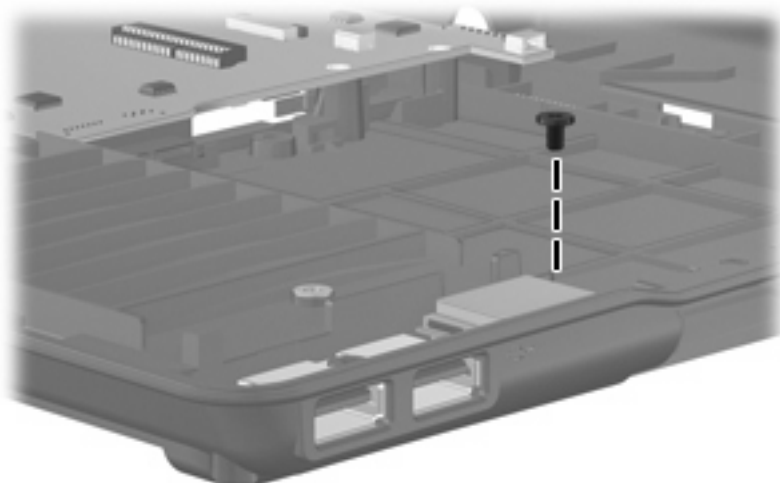


The diagram shows a Phillips PM2.0×4.0 screw next to a ruler. The ruler has markings in millimeters (mm). The screw's head diameter is 4.5 mm, and its length is 4.0 mm. The thread pitch is 2.0 mm.

Color	Quantity	Length	Thread	Head diameter
Silver or Black	3	4.0 mm	2.0 mm	4.5 mm

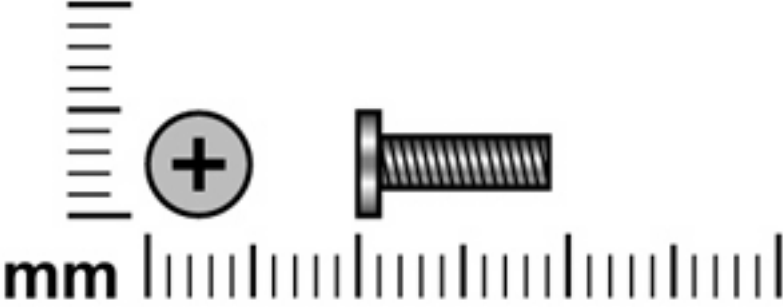


**Where used:** 2 silver screws that secure the TouchPad bracket and TouchPad button board to the top cover

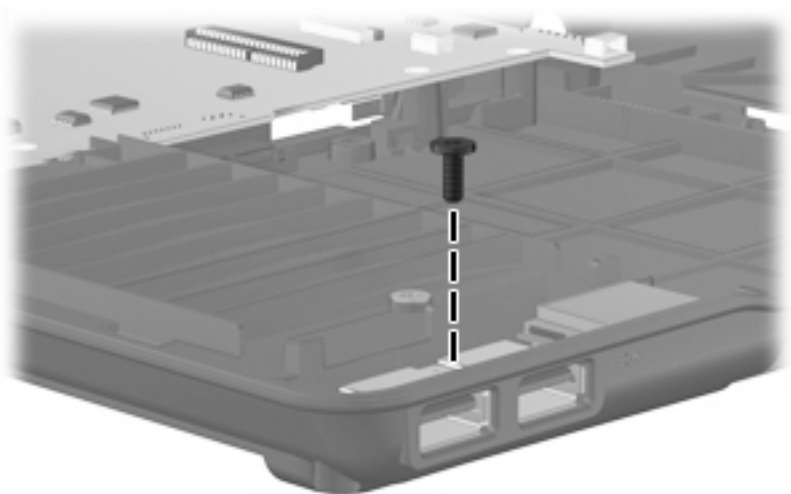


**Where used:** One black screw that secures the Bluetooth module to the base enclosure

# Phillips PM2.5×9.0 screw

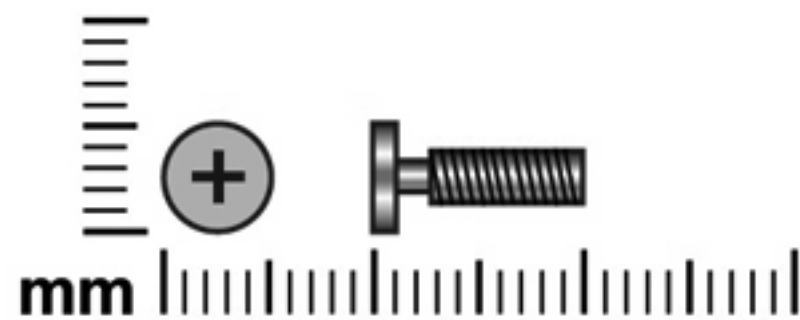


Color	Quantity	Length	Thread	Head diameter
Black	1	9.0 mm	2.5 mm	5.0 mm

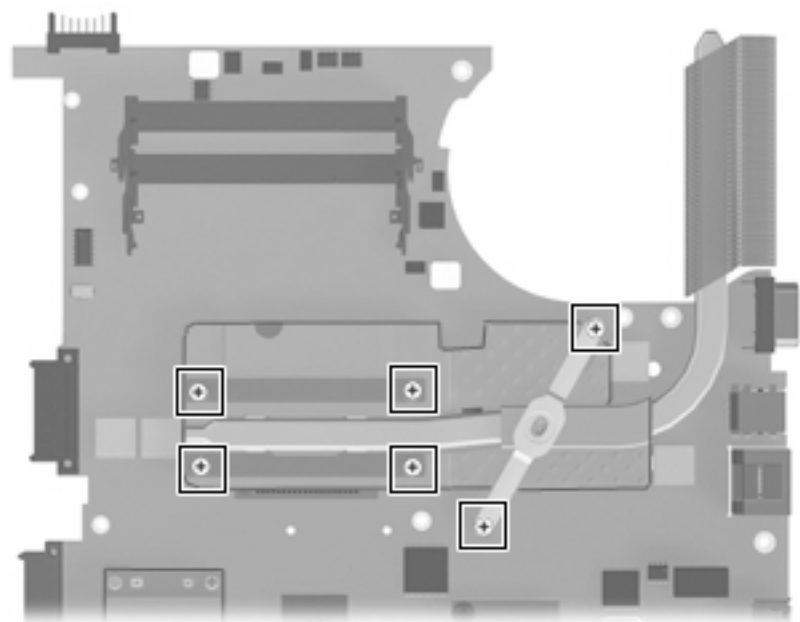


**Where used:** One screw that secures the USB board to the system board

# Phillips PM2.5×10.0 captive screw

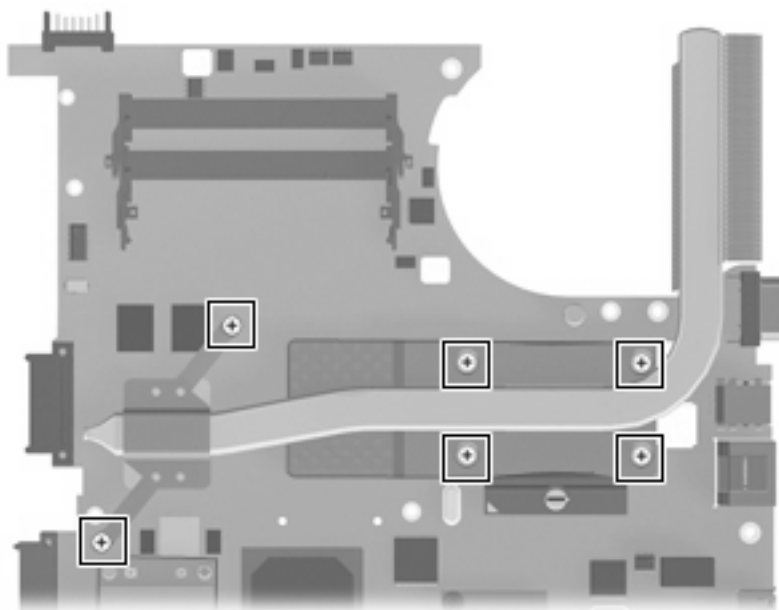


Color	Quantity	Length	Thread	Head diameter
Silver	16	10.0 mm	2.5 mm	5.0 mm

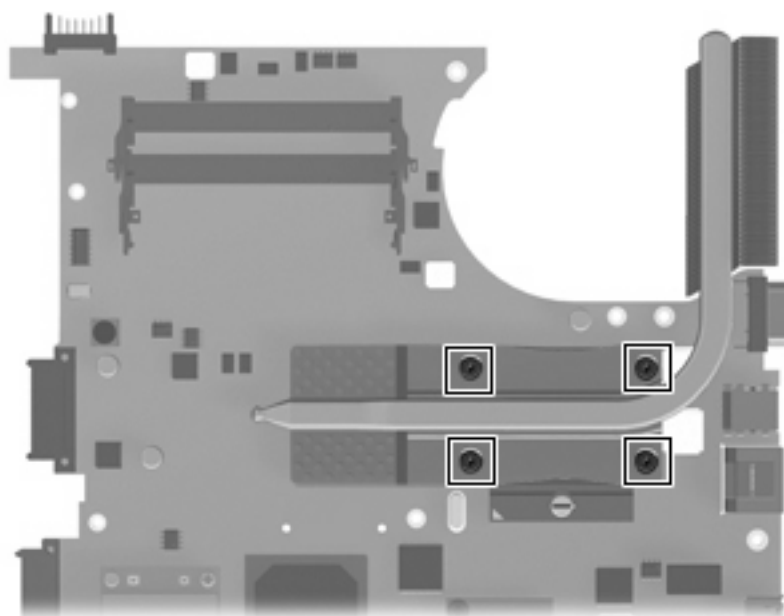


**Where used:** 6 captive screws that secure the heat sink to the system board for use only with HP Compaq 6535s Notebook PC models (screws are secured to the heat sink by C-clips)





**Where used:** 6 captive screws that secure the heat sink to the system board for use only with HP Compaq 6530s Notebook PC models (screws are secured to the heat sink by C-clips)



**Where used:** 4 captive screws that secure the heat sink to the system board for use only with HP Compaq 6531s Notebook PC models (screws are secured to the heat sink by C-clips)

---

## 8 Backup and recovery

### Backup and recovery in Windows Vista

#### Overview

To protect your information, use the Backup and Restore Center to back up individual files and folders, back up your entire hard drive (select models only), or create system restore points. In case of system failure, you can use the backup files to restore the contents of your computer.

The Backup and Restore Center provides the following options:

- Backing up individual files and folders
- Backing up the entire hard drive (select models only)
- Scheduling automatic backups (select models only)
- Creating system restore points
- Recovering individual files
- Restoring the computer to a previous state
- Recovering information using recovery tools



**NOTE:** For detailed instructions, perform a search for these topics in Help and Support.

**NOTE:** In case of system instability, HP recommends that you print the recovery procedures and save them for later use.

---

#### Backing up your information

Recovery after a system failure is as complete as your most current backup. You should create your initial backup immediately after software setup. As you add new software and data files, you should continue to back up your system on a regular basis to maintain a reasonably current backup.

You can back up your information to an optional external hard drive, a network drive, or discs.

Note the following when backing up:

- Store personal files in the Documents folder, and back it up regularly.
- Back up templates that are stored in their associated programs.
- Save customized settings that appear in a window, toolbar, or menu bar by taking a screen shot of your settings. The screen shot can be a time-saver if you have to reset your preferences.

To create a screen shot:

1. Display the screen you want to save.
2. Copy the screen image:

To copy only the active window, press **alt+fn+prt sc**.


To copy the entire screen, press **fn+prt sc**.

3. Open a word-processing document, and then select **Edit > Paste**.

The screen image is added to the document.


4. Save the document.

- When backing up to discs, use any of the following types of discs (purchased separately): CD-R, CD-RW, DVD+R, DVD+R DL, DVD-R, DVD-R DL, or DVD±RW. The discs you use will depend on the type of optical drive installed in your computer.

 **NOTE:** DVDs and DVDs with double-layer (DL) support store more information than CDs, so using them for backup reduces the number of recovery discs required.


- When backing up to discs, number each disc before inserting it into the optical drive of the computer.

To create a backup using Backup and Restore Center, follow these steps:

 **NOTE:** Be sure that the computer is connected to AC power before you start the backup process.

**NOTE:** The backup process may take over an hour, depending on file size and the speed of the computer.


1. Select **Start > All Programs > Maintenance > Backup and Restore Center**.
2. Follow the on-screen instructions to back up your entire computer (select models only) or your files.

 **NOTE:** Windows includes the User Account Control feature to improve the security of your computer. You may be prompted for your permission or password for tasks such as installing software, running utilities, or changing Windows settings. Refer to Help and Support for more information.

## Performing a recovery

In case of system failure or instability, the computer provides the following tools to recover your files:


- Windows recovery tools: You can use the Backup and Restore Center to recover information you have previously backed up. You can also use Windows Startup Repair to fix problems that might prevent Windows from starting correctly.
- **f11** recovery tools: You can use the **f11** recovery tools to recover your original hard drive image. The image includes the Windows operating system and software programs installed at the factory.

 **NOTE:** If you are unable to boot (start up) your computer, you must purchase a Windows Vista operating system DVD to reboot the computer and repair the operating system. For additional information, refer to the “Using a Windows Vista operating system DVD (purchased separately)” section in this guide.

## Using the Windows recovery tools

To recover information you previously backed up, follow these steps:

1. Click **Start > All Programs > Maintenance > Backup and Restore Center**.
2. Follow the on-screen instructions to recover your entire computer (select models only) or your files.

 **NOTE:** Windows includes the User Account Control feature to improve the security of your computer. You may be prompted for your permission or password for tasks such as installing software, running utilities, or changing Windows settings. Refer to Help and Support for more information.


---

To recover your information using Startup Repair, follow these steps:

△ **CAUTION:** Using Startup Repair completely erases hard drive contents and reformats the hard drive. All files you have created and any software installed on the computer are permanently removed. When reformatting is complete, the recovery process restores the operating system, as well as the drivers, software, and utilities from the backup used for recovery.


---

1. If possible, back up all personal files.
2. If possible, check for the presence of the Windows partition and the HP Recovery partition. To find the partitions, select **Start > Computer**.

 **NOTE:** If the Windows partition and the HP Recovery partition have been deleted, you must recover your operating system and programs using the Windows Vista operating system DVD and the *Driver Recovery* disc (both purchased separately). For additional information, refer to the “Using a Windows Vista operating system DVD (purchased separately)” section in this guide.

---

3. Restart the computer, and then press **f8** before the Windows operating system loads.
4. Select **Repair your computer**.
5. Follow the on-screen instructions.

 **NOTE:** For additional information on recovering information using the Windows tools, perform a search for these topics in Help and Support.

---


## Using f11

△ **CAUTION:** Using **f11** completely erases hard drive contents and reformats the hard drive. All files you have created and any software installed on the computer are permanently removed. The **f11** recovery tool reinstalls the operating system and HP programs and drivers that were installed at the factory. Software not installed at the factory must be reinstalled.

---

To recover the original hard drive image using **f11**, follow these steps:

1. If possible, back up all personal files.
2. If possible, check for the presence of the HP Recovery partition. To find the partition, select **Start > Computer**.

 **NOTE:** If the HP Recovery partition has been deleted, you must recover your operating system and programs using the Windows Vista operating system DVD and the *Driver Recovery* disc (both purchased separately). For additional information, refer to the “Using a Windows Vista operating system DVD (purchased separately)” section in this guide.

---

3. Turn on or restart the computer, and then press **esc** while the “Press the ESC key for Startup Menu” message is displayed at the bottom of the screen.

4. Press **f11** while the “Press <F11> for recovery” message is displayed on the screen.
5. Follow the on-screen instructions.

### Using a Windows Vista operating system DVD (purchased separately)

If you are unable to boot (start up) your computer, you must purchase a Windows Vista operating system DVD to reboot the computer and repair the operating system. Make sure that your most recent backup (stored on discs or on an external drive) is easily accessible. To order a Windows Vista operating system DVD, go to <http://www.hp.com/support>, select your country or region, and follow the on-screen instructions. You can also order the DVD by calling technical support. For contact information, refer to the *Worldwide Telephone Numbers* booklet included with the computer.


---

△ **CAUTION:** Using a Windows Vista operating system DVD completely erases hard drive contents and reformats the hard drive. All files you have created and any software installed on the computer are permanently removed. When reformatting is complete, the recovery process helps you restore the operating system, as well as drivers, software, and utilities.

---

To initiate recovery using a Windows Vista operating system DVD, follow these steps:

---

 **NOTE:** This process takes several minutes.

---

1. If possible, back up all personal files.
2. Restart the computer, and then insert the Windows Vista operating system DVD into the optical drive before the Windows operating system loads.
3. When prompted, press any keyboard key.
4. Follow the on-screen instructions.
5. Click **Next**.
6. Select **Repair your computer**.
7. Follow the on-screen instructions.

# Backup and recovery in Windows XP


## Overview

To protect your information, use the Windows Backup utility (select models only) to back up files and folders or create recovery points. In case of system failure, you can use the backup files to restore your computer.

Windows provides the following options:

- Backing up individual files and folders
- Backing up all files and folders
- Scheduling automatic backups
- Creating recovery points
- Recovering information

---

 **NOTE:** For detailed instructions, perform a search for these topics in Help and Support.

**NOTE:** In case of system instability, HP recommends that you print the recovery procedures and save them for later use.

---

## Backing up your information

Recovery after a system failure is as complete as your most current backup. You should create your initial backup immediately after software setup. As you add new software and data files, you should continue to back up your system on a regular basis to maintain a reasonably current backup.

You can back up individual files or folders to an optional external hard drive or to a network drive.

Note the following when backing up:

- Store personal files in the My Documents folder, and back it up periodically.
- Back up templates stored in their associated programs.
- Save customized settings that appear in a window, toolbar, or menu bar by taking a screen shot of your settings. The screen shot can be a time saver if you have to reset your preferences.

To copy the screen and paste it into a word-processing document:

- a. Display the screen you want to save.
- b. Copy the screen image:  
To copy only the active window, press **alt+fn+prt sc**.  
To copy the entire screen, press **fn+prt sc**.
- c. Open a word-processing document, click **Edit > Paste**.  
The screen image is added to the document.
- d. Save the document.

To create a backup using the Windows Backup utility, follow these steps:



---

**NOTE:** Be sure that the computer is connected to AC power before you start the backup process.

**NOTE:** The backup process may take over an hour, depending on file size and the speed of the computer.

---

1. Click **Start > All Programs > Accessories > System Tools > Backup**.
2. Follow the on-screen instructions.

## Performing a recovery

In case of system failure or instability, the computer provides the following tools to recover your files:

- Windows recovery tools (select models only): You can use the Windows Backup utility to recover information you have previously backed up.
- *Operating System* and *Driver Recovery* discs (included with your computer): You can use the discs to recover your operating system and programs installed at the factory.

## Recovering your information

To recover information you previously backed up, follow these steps:

1. If possible, back up all personal files.
2. Click **Start > All Programs > Accessories > System Tools > Backup**.  
The Backup or Restore Wizard opens.
3. Click **Restore files and settings**, and then click **Next**.
4. Follow the on-screen instructions.



---

**NOTE:** For additional information on initiating a recovery in Windows, perform a search for this topic in Help and Support.

---

## Recovering the operating system and programs



---

**CAUTION:** The recovery process reformats and completely erases the hard drive. All files you have created and any software installed on the computer are permanently removed. The recovery process reinstalls the original operating system, software, and drivers. Software, drivers, and updates not installed by HP must be manually reinstalled.

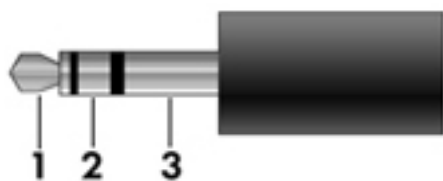
---

To recover your operating system and programs, follow these steps:

1. If possible, back up all personal files.
2. Insert the *Operating System* disc into the optical drive.
3. Shut down the computer.
4. Turn on the computer.
5. Follow the on-screen instructions to install the operating system.
6. After the operating system is installed, remove the *Operating System* disc and insert the *Driver Recovery* disc.
7. Follow the on-screen instructions to install the drivers and programs.

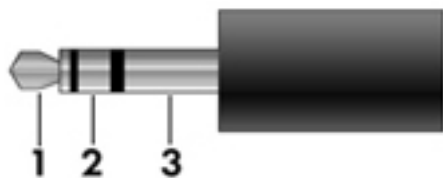
## 9 Connector pin assignments

### Audio-in (microphone)



Pin	Signal
1	Audio signal in
2	Audio signal in
3	Ground

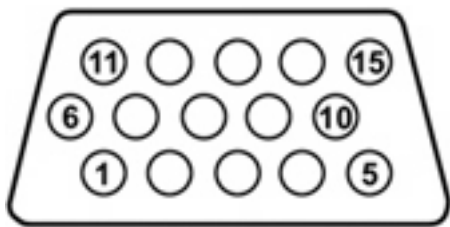
### Audio-out (headphone)



Pin	Signal
1	Audio out, left channel
2	Audio out, right channel
3	Ground

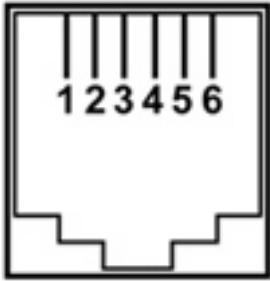


# External monitor



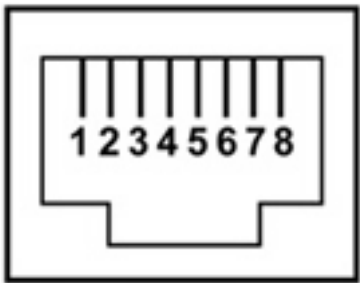
Pin	Signal
1	Red analog
2	Green analog
3	Blue analog
4	Not connected
5	Ground
6	Ground analog
7	Ground analog
8	Ground analog
9	+5 VDC
10	Ground
11	Monitor detect
12	DDC 2B data
13	Horizontal sync
14	Vertical sync
15	DDC 2B clock

## RJ-11 (modem)



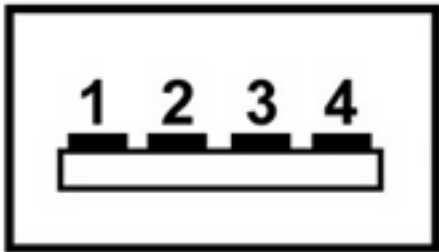
Pin	Signal
1	Unused
2	Tip
3	Ring
4	Unused
5	Unused
6	Unused

# RJ-45 (network)



Pin	Signal
1	Transmit +
2	Transmit -
3	Receive +
4	Unused
5	Unused
6	Receive -
7	Unused
8	Unused

# Universal Serial Bus



Pin	Signal
1	+5 VDC
2	Data -
3	Data +
4	Ground

---

## 10 Power cord set requirements

The wide range input feature of the computer permits it to operate from any line voltage from 100 to 120 volts AC or from 220 to 240 volts AC.

The 3-conductor power cord set included with the computer meets the requirements for use in the country or region where the equipment is purchased.

Power cord sets for use in other countries and regions must meet the requirements of the country or region where the computer is used.

### Requirements for all countries and regions

The requirements listed below are applicable to all countries and regions:

- The length of the power cord set must be at least 1.5 m (5.0 ft) and no more than 2.0 m (6.5 ft).
- All power cord sets must be approved by an acceptable accredited agency responsible for evaluation in the country or region where the power cord set will be used.
- The power cord sets must have a minimum current capacity of 10 amps and a nominal voltage rating of 125 or 250 V AC, as required by the power system of each country or region.
- The appliance coupler must meet the mechanical configuration of an EN 60 320/IEC 320 Standard Sheet C13 connector for mating with the appliance inlet on the back of the computer.

## Requirements for specific countries and regions

Country/region	Accredited agency	Applicable note number
Australia	EANSW	1
Austria	OVE	1
Belgium	CEBC	1
Canada	CSA	2
Denmark	DEMKO	1
Finland	FIMKO	1
France	UTE	1
Germany	VDE	1
Italy	IMQ	1
Japan	METI	3
The Netherlands	KEMA	1
Norway	NEMKO	1
The People's Republic of China	CCC	5
South Korea	EK	4
Sweden	SEMKO	1
Switzerland	SEV	1
Taiwan	BSMI	4
The United Kingdom	BSI	1
The United States	UL	2

1. The flexible cord must be Type HO5VV-F, 3-conductor, 1.0-mm<sup>2</sup> conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country or region where it will be used.
2. The flexible cord must be Type SPT-3 or equivalent, No. 18 AWG, 3-conductor. The wall plug must be a two-pole grounding type with a NEMA 5-15P (15 A, 125 V) or NEMA 6-15P (15 A, 250 V) configuration.
3. The appliance coupler, flexible cord, and wall plug must bear a "T" mark and registration number in accordance with the Japanese Dentori Law. The flexible cord must be Type VCT or VCTF, 3-conductor, 1.00-mm<sup>2</sup> conductor size. The wall plug must be a two-pole grounding type with a Japanese Industrial Standard C8303 (7 A, 125 V) configuration.
4. The flexible cord must be Type RVV, 3-conductor, 0.75-mm<sup>2</sup> conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country or region where it will be used.
5. The flexible cord must be Type VCTF, 3-conductor, 0.75-mm<sup>2</sup> conductor size. Power cord set fittings (appliance coupler and wall plug) must bear the certification mark of the agency responsible for evaluation in the country or region where it will be used.

# 11 Recycling

## Battery

When a battery has reached the end of its useful life, do not dispose of the battery in general household waste. Follow the local laws and regulations in your area for computer battery disposal.

## Display

- ⚠ **WARNING!** The backlight contains mercury. Exercise caution when removing and handling the backlight to avoid damaging this component and causing exposure to the mercury.
- ⚠ **CAUTION:** The procedures in this chapter can result in damage to display components. The only components intended for recycling purposes are the liquid crystal display (LCD) panel and the backlight. When you remove these components, handle them carefully.
- 📝 **NOTE: Materials Disposal.** This HP product contains mercury in the backlight in the display assembly that might require special handling at end-of-life. Disposal of mercury may be regulated because of environmental considerations. For disposal or recycling information, contact your local authorities, or see the Electronic Industries Alliance (EIA) Web site at <http://www.eiae.org>.

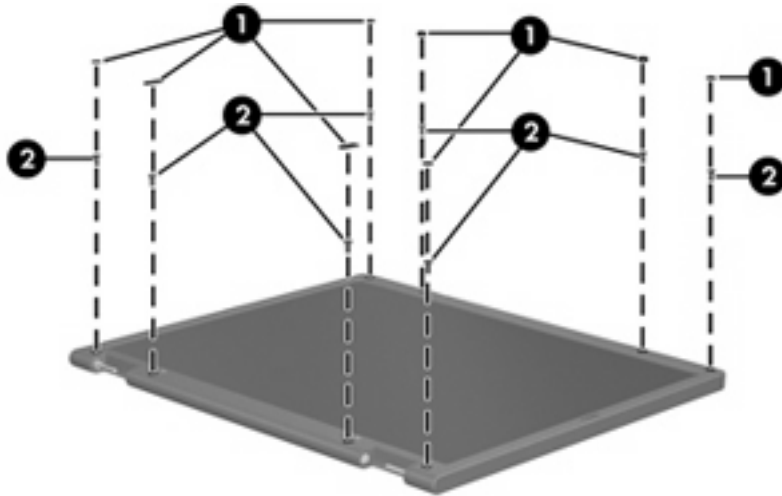
This section provides disassembly instructions for the display assembly. The display assembly must be disassembled to gain access to the backlight **(1)** and the liquid crystal display (LCD) panel **(2)**.



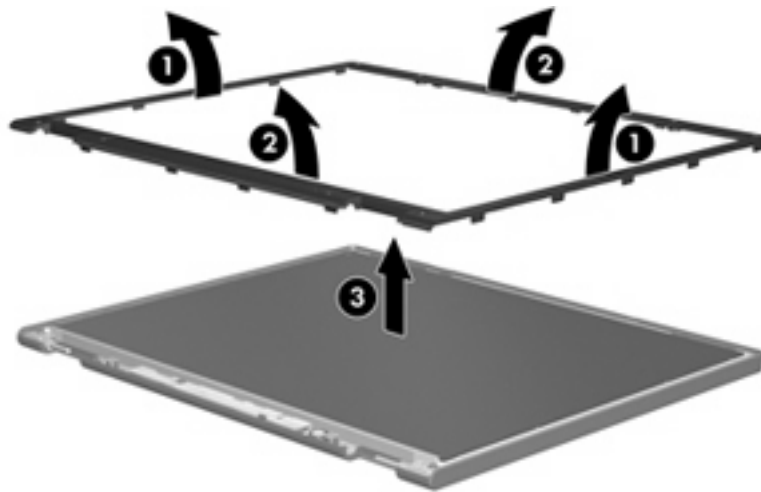
- 📝 **NOTE:** The procedures provided in this chapter are general disassembly instructions. Specific details, such as screw sizes, quantities, and locations, and component shapes and sizes, can vary from one computer model to another.

Perform the following steps to disassemble the display assembly:

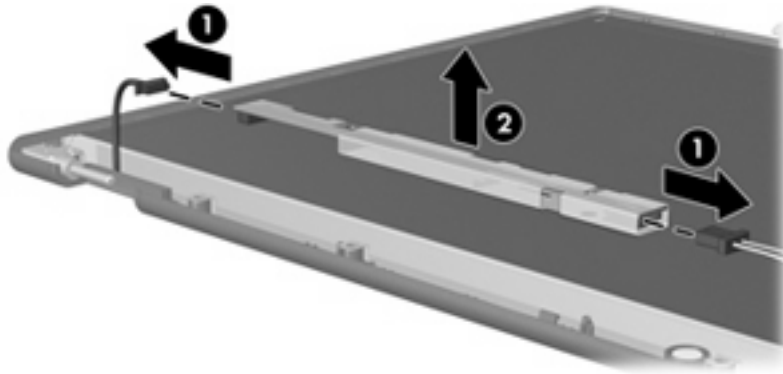
1. Remove all screw covers (1) and screws (2) that secure the display bezel to the display assembly.



2. Lift up and out on the left and right inside edges (1) and the top and bottom inside edges (2) of the display bezel until the bezel disengages from the display assembly.
3. Remove the display bezel (3).

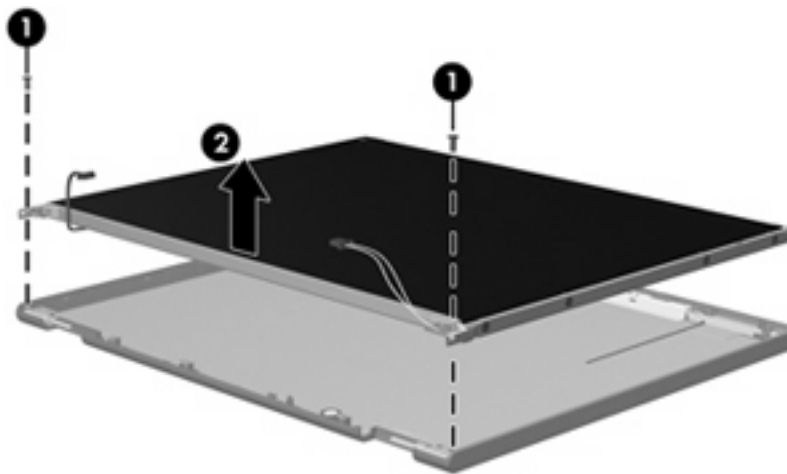


4. Disconnect all display panel cables (1) from the display inverter and remove the inverter (2).



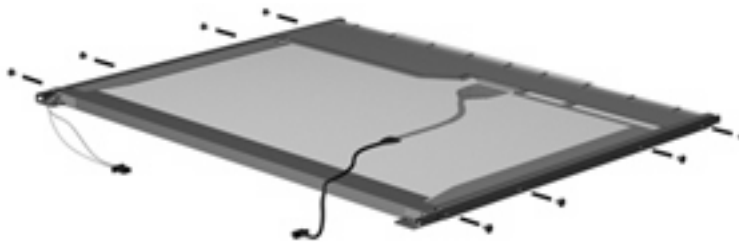
5. Remove all screws (1) that secure the display panel assembly to the display enclosure.

6. Remove the display panel assembly (2) from the display enclosure.



7. Turn the display panel assembly upside down.

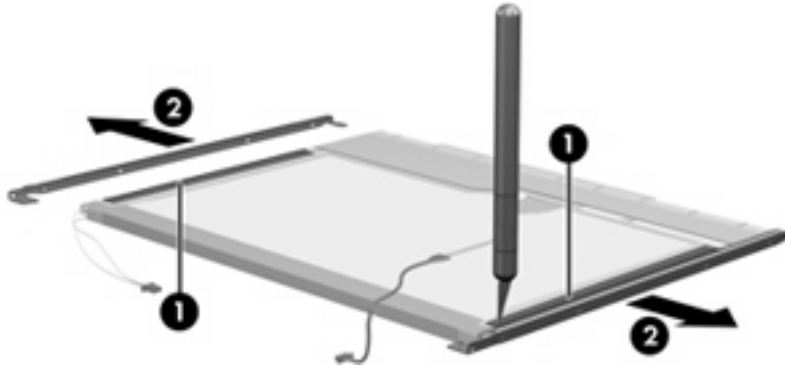
8. Remove all screws that secure the display panel frame to the display panel.



9. Use a sharp-edged tool to cut the tape (1) that secures the sides of the display panel to the display panel frame.

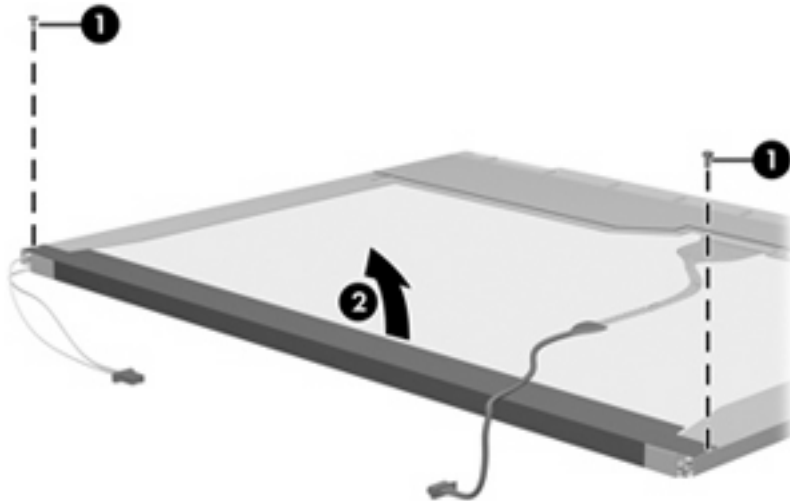


10. Remove the display panel frame (2) from the display panel.



11. Remove the screws (1) that secure the backlight cover to the display panel.

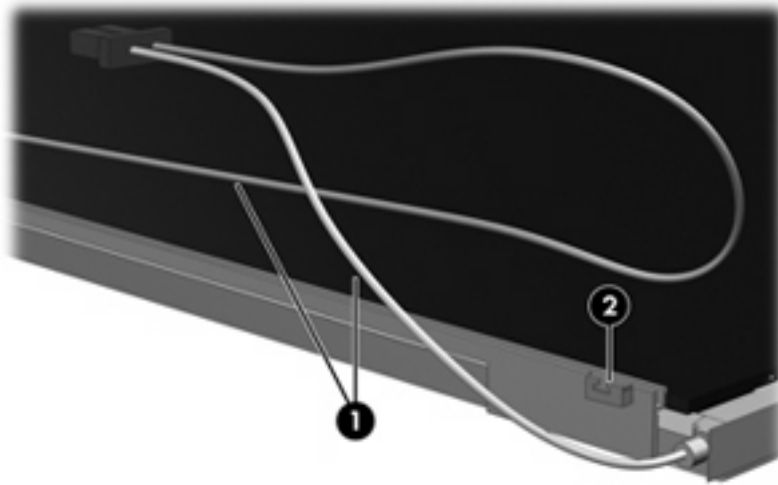
12. Lift the top edge of the backlight cover (2) and swing it outward.



13. Remove the backlight cover.

14. Turn the display panel right-side up.

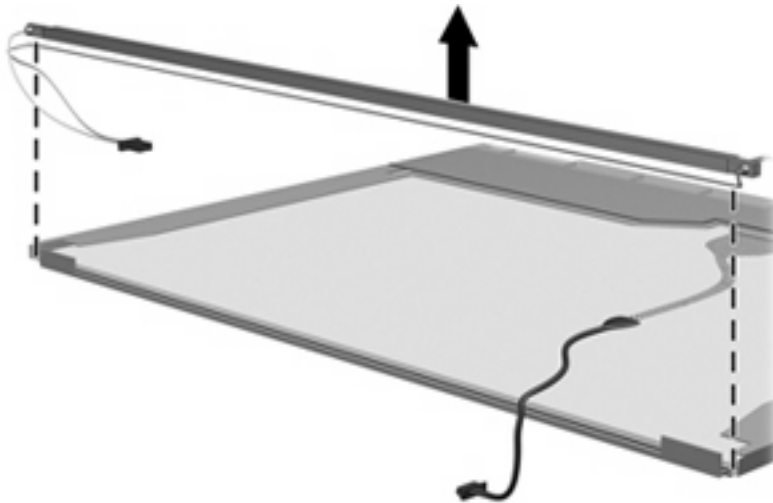
15. Remove the backlight cables (1) from the clip (2) in the display panel.



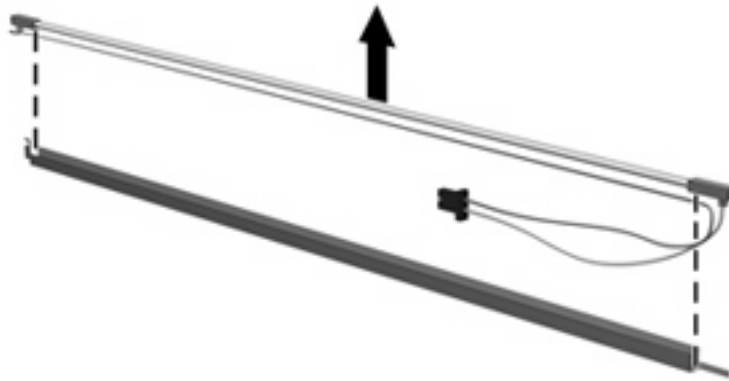
16. Turn the display panel upside down.

⚠ **WARNING!** The backlight contains mercury. Exercise caution when removing and handling the backlight to avoid damaging this component and causing exposure to the mercury.

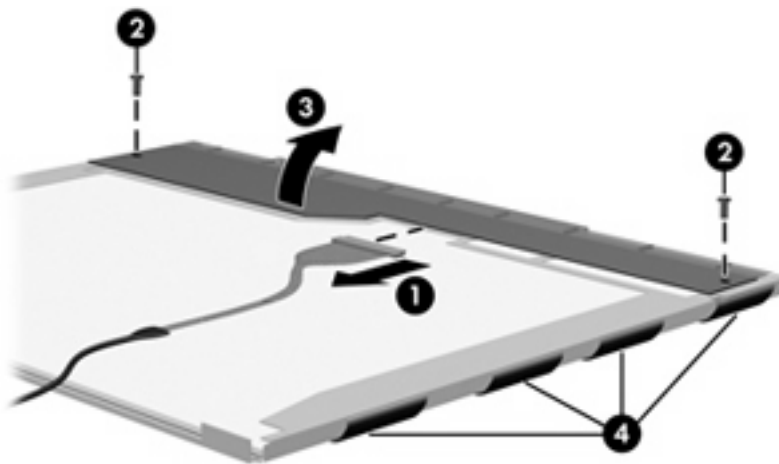
17. Remove the backlight frame from the display panel.



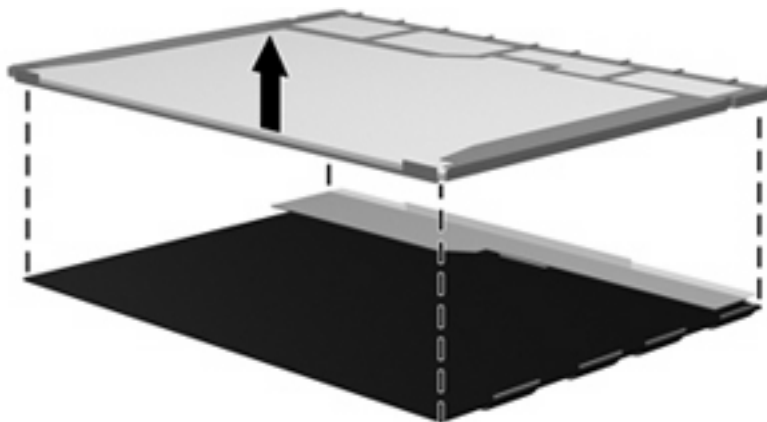
18. Remove the backlight from the backlight frame.



19. Disconnect the display panel cable (1) from the LCD panel.
20. Remove the screws (2) that secure the LCD panel to the display rear panel.
21. Release the LCD panel (3) from the display rear panel.
22. Release the tape (4) that secures the LCD panel to the display rear panel.



23. Remove the LCD panel.



24. Recycle the LCD panel and backlight.

---

# Index

- A**
- AC adapter, spare part
    - numbers 29, 32
  - AMT options 99
  - AMT options, AMT setup prompt (CTRL-P) 99
  - AMT options, firmware progress event supporty 99
  - AMT options, firmware verbosity 99
  - AMT options, terminal emulation mode 99
  - AMT options, TYPE-131 in SMBIOS 99
  - AMT options, unconfigure AMT on next boot 99
  - AMT options, USB key provisioning support 99
  - antenna, disconnecting 52
  - audio, product description 5
  - audio-in jack
    - location 12
    - pin assignments 136
  - audio-out jack
    - location 12
    - pin assignments 136
- B**
- backing up, Windows Vista 130
  - backing up, Windows XP 134
  - Backup and Restore Center 130, 131
  - base enclosure, spare part
    - number 21, 34, 36
  - battery
    - location 15
    - removal 46
    - spare part number 21, 32, 35, 46
  - battery bay 15
  - battery latches 15
  - battery light 14
  - BIOS Administrator password 96
  - Blu-ray Disc ROM with SuperMulti DVD±R/RW Double-Layer
    - spare part number 24, 27, 34, 55
  - Bluetooth cable
    - illustrated 26
  - Bluetooth module
    - removal 73
    - spare part numbers 19, 31, 73
  - boot options 97
  - boot order 97
  - bottom components 15
  - built-in device
    - ambient light sensor 98
    - Bluetooth device radio 98
    - embedded WLAN 98
    - fingerprint reader 98
    - integrated camera 98
    - LAN/WLAN switching 98
    - modem 98
    - Network Interface Controller (LAN) 98
    - Wake on LAN 98
    - wireless button 98
    - WWAN device radio 98
  - built-in device options 98
  - built-in-device
    - Notebook Multibay 98
  - button components 10
  - buttons
    - power 10
    - TouchPad 9
    - wireless 10
- C**
- Cable Kit
    - contents 26
    - spare part number 19, 26
  - cable kit
    - spare part number 35, 36
  - cables, service considerations 39
  - camera
    - spare part numbers 34, 36
  - caps lock light 11
  - carrying case, spare part
    - number 29, 31
  - chipset, product description 2
  - CMOS clearing 43
  - components
    - bottom 15
    - buttons 10
    - display 8
    - front 12
    - keys 11
    - left-side 14
    - lights 10
    - pointing devices 9
    - right-side 12
    - speakers 10
    - top 8
    - TouchPad 9
  - computer feet
    - locations 45
    - spare part number 45
  - Computer Setup
    - accessing 91
    - Diagnostics menu 96
    - File menu 94
    - navigating and selecting 92
    - restoring factory settings 92
    - Security menu 95

- System Configuration
  - menu 97
  - using 92
- computer specifications 100
- connectors
  - power 14
  - service considerations 39

## D

- device configurations 97
- Diagnostics menu 96
- discs
  - Driver Recovery 135
  - Operating System 135
- Disk Sanitizer 95
- diskette drive
  - precautions 39
  - product description 5
  - spare part number 29, 31
- display
  - components 8
  - illustrated 8
- display assembly
  - removal 62
  - spare part numbers 17, 62
- display bezel
  - removal 64
  - spare part number 18, 34, 64
- display cable kit
  - spare part numbers 34, 36
- display component recycling 142
- display components 8
- display enclosure, spare part number 18
- display hardware kit
  - spare part number 29, 36
- display hinge
  - removal 66
  - spare part number 18, 34, 36, 66
- display inverter
  - removal 65
  - spare part number 18, 34, 36, 65
- display panel, removal 65
- display specifications 101
- drive light 12
- DriveLock password 95
- DriveLock, automatic 95

- Driver Recovery disc 135
- drives
  - preventing damage 39
- drives, boot order 97
- Dual-Core CPU 98
- DVD-ROM Drive
  - spare part number 24, 27, 34, 36, 55
  - specifications 105
- DVD/CD-RW Combo Drive
  - precautions 39
  - removal 55
  - spare part number 24, 27, 36, 55
  - specifications 104
- DVD±RW and CD-RW Combo Drive, Double-Layer
  - precautions 39
  - spare part number 24, 27, 34, 55
  - specifications 103
- DVD±RW DL Drive with LightScribe
  - spare part number 55
- DVD±RW Double-Layer Drive with LightScribe
  - spare part number 24, 27
- DVD±RW Drive
  - spare part number 34, 36, 55

## E

- electrostatic discharge 40
- esc key 11
- Ethernet, product description 5
- Execution Disable 97
- ExpressCard assembly
  - spare part numbers 19
- ExpressCard slot 14
- ExpressCard slot bezel, illustrated 25
- external monitor port
  - location 14
  - pin assignments 137

## F

- f11 recovery 132
- fan
  - removal 77
  - spare part number 19, 33, 36, 77

- feet
  - locations 45
  - spare part number 45
- File menu 94
- fn key 11
- front components 12
- function keys 11

## G

- graphics, product description 2
- grounding equipment and methods 42

## H

- hard disk test 96
- hard drive
  - location 15
  - precautions 39
  - product description 4
  - removal 47
  - spare part number 34, 37
  - spare part numbers 23, 27, 36, 37, 47
  - specifications 102
- hard drive bay 15
- hard drive bay cover
  - illustrated 25
  - removal 48
- hard drive bracket, removal 49
- hard drive recovery 132
- headphone jack
  - location 12
  - pin assignments 136
- heat sink
  - removal 84
  - spare part number 35
  - spare part number 19, 36
  - spare part numbers 84
- hinge
  - removal 66
  - spare part number 18, 34, 36, 66
- HP QuickLook 2 98
- HP SpareKey enrollment 96

## I

- I/O address specifications 108
- internal display switch 11
- interrupt specifications 107

## J

### jacks

- audio-in 12
- audio-out 12
- headphone 12
- microphone 12
- modem 14
- network 14
- RJ-11 14
- RJ-45 14

## K

### key components 11

### keyboard

- product description 6
- removal 57
- spare part number 34
- spare part numbers 18, 57

### keypad keys 11

### keys

- esc 11
- fn 11
- function 11
- keypad 11
- num lk 11
- Windows applications 11
- Windows logo 11

## L

### LAN Power Save 97

### language, changing in Computer Setup 97

### left-side components 14

### legacy support, USB 91, 97

### light components 10

### lights

- battery 14
- caps lock 11
- drive 12
- power 10
- wireless 10

### Logo Kit

- spare part number 35

### Logo Kit, spare part number 29, 36

## M

### mass storage devices, spare part numbers 27

### Media Card Reader 12

### memory map specifications 110

### memory module

- product description 3
- removal 53
- spare part numbers 24, 35, 53

### memory module compartment 15

### memory module compartment

#### cover

- illustrated 25
- removal 54

### microphone jack

- location 12
- pin assignments 136

### microphone, internal 12

### model name 1

### modem

- spare part number 19

### modem jack

- location 14
- pin assignments 138

### modem module

- product description 5
- removal 82
- spare part numbers 21, 32, 33, 82

### monitor port

- location 14
- pin assignments 137

## N

### network jack

- location 14
- pin assignments 139

### num lk key 11

## O

### Operating System disc 135

### operating system, product description 6

### optical drive

- location 13
- precautions 39
- product description 4
- removal 55
- spare part numbers 24, 27, 55
- specifications 103, 104, 105

## P

### packing guidelines 41

### panels, product description 3

### parallel port mode 97

### password clearing 43

### passwords 95

### pin assignments

- audio-in jack 136
- audio-out jack 136
- external monitor port 137
- headphone jack 136
- microphone jack 136
- modem jack 138
- monitor port 137
- network jack 139
- RJ-11 138
- RJ-45 jack 139
- Universal Serial Bus (USB) port 139

### plastic parts 38

### Plastics Kit

- contents 25
- spare part number 19, 25, 33, 36

### pointing device

- components 9
- illustrated 9

### pointing device components

- TouchPad 9
- TouchPad buttons 9
- TouchPad scroll zone 9

### pointing devices, product description 6

### port options

- 1394 port 99
- ExpressCard slot 98
- flash media reader 99
- parallel port 99
- serial port 98
- Smart Card slot 98
- USB port 99

### ports

- external monitor 14
- monitor 14
- product description 6
- Universal Serial Bus (USB) 12, 14

### power button 10

### power button board

- spare part number 18

### power connector 14

- power cord
  - set requirements 140
  - spare part numbers 29, 33
- power light 10
- power requirements, product description 6
- processor
  - product description 1
  - removal 88
  - spare part numbers 20, 35, 37, 88
- product description
  - audio 5
  - chipset 2
  - diskette drive 5
  - Ethernet 5
  - external media cards 6
  - graphics 2
  - hard drives 4
  - keyboard 6
  - memory module 3
  - modem module 5
  - operating system 6
  - optical drives 4
  - panels 3
  - pointing devices 6
  - ports 6
  - power requirements 6
  - processors 1
  - product name 1
  - security 6
  - serviceability 7
  - wireless 5
- product name 1

## R

- RAID (Redundant Array of Independent Disks) devices 97
- recovery partition 132
- removal/replacement
  - preliminaries 38
  - procedures 44
- restore security defaults 99
- restore the factory settings 94
- restoring the hard drive 132
- right-side components 12
- RJ-11 jack
  - location 14
  - pin assignments 138

- RJ-11 jack cable
  - illustrated 26
- RJ-45 jack
  - location 14
  - pin assignments 139
- RTC battery
  - removal 75
  - spare part number 21, 31, 75
- Rubber Kit
  - spare part number 35
- Rubber Kit, spare part number 36
- run-in test 96

## S

- s, product description 6
- SATA (Serial Advanced Technology Attachment) devices
  - AHCI (Advanced Host Controller Interface) 97
  - IDE (Integrated Drive Electronics) 97
- Screw Kit
  - contents 111
  - spare part number 29, 35, 36
- screw listing 111
- Secondary Battery Fast Charge 98
- security cable slot 13
- Security menu
  - always prompt for HP SpareKey enrollment 96
  - Automatic DriveLock 95
  - change password 95
  - Disk Sanitizer 95
  - DriveLock 95
  - fingerprint reader reset 95
  - HP Sparekey 95
  - HP Sparekey enrollment 95
  - password policy 95
  - set up BIOS Administrator password 96
  - System IDs 96
  - TPM embedded Security 95
  - user management 95
- security, product description 6
- service considerations 38
- service tag 16, 44

- serviceability, product description 7
- set security level 99
- setup utility
  - Diagnostics menu 96
  - File menu 94
  - navigating and selecting 92
  - restoring factory settings 92
  - Security menu 95
  - System Configuration menu 97
- speakers
  - removal 61
  - spare part number 35, 36
  - spare part numbers 19, 61
- speakers, location 11
- specifications
  - computer 100
  - display 101
  - DVD-ROM Drive 105
  - DVD/CD-RW Combo Drive 104
  - DVD±RW and CD-RW Combo Drive, Double-Layer 103
  - hard drive 102
  - I/O addresses 108
  - interrupts 107
  - memory map 110
  - optical drive 103, 104, 105
  - system DMA 106
- start-up test 96
- static-shielding materials 42
- switch cover
  - removal 57
  - spare part number 18, 35, 36
  - spare part numbers 57
- switches
  - internal display 11
- system board
  - removal 79
  - spare part number 33, 35, 37
  - spare part numbers 19, 36, 79
- System Configuration menu 97
- system date and time 94
- System Diagnostics menu 96
- system DMA 106
- system fan 97

- system IDs 96
- system information 94
- system memory map 110

## T

- thermal material,
  - replacement 85, 86, 87
- tools required 38
- top components 8
- top cover
  - removal 68
  - spare part number 19, 34, 68
- TouchPad 9
- TouchPad buttons 9
- TouchPad cable
  - spare part number 19
- TouchPad components 9
- TouchPad Miscellaneous Kit, spare part number 19
- TouchPad scroll zone 9
- transporting guidelines 41
- Trusted Platform Module
  - Embedded Security 95
- TXT (Intel Trusted Execution Technology) 98

## U

- Unified Extensible Firmware Interface (UEFI) mode 98
- unknown password 43
- USB cable
  - illustrated 26
- USB connector and cable
  - spare part number 19
- USB connector module
  - removal 72
- USB legacy support 91, 97
- USB port
  - location 14
  - pin assignments 139
- USB port, location 12

## V

- vents 14, 15
- Virtualization Technology 98

## W

- webcam module
  - spare part numbers 34, 36
- Windows applications key 11

- Windows Backup utility 134, 135
- Windows logo key 11
- Windows recovery 131, 135
- Windows Vista operating system
  - DVD 133
- wireless antenna,
  - disconnecting 52
- wireless button 10
- wireless light 10
- wireless, product description 5
- WLAN module
  - removal 50
  - spare part numbers 21, 31, 32, 33, 50
- WLAN module compartment 15
- WLAN module compartment cover
  - illustrated 25
  - removal 52
- workstation guidelines 41



